SCHOOL EDUCATION IN THE 1990s

SCHOOL EDUCATION IN THE 1990s

Problems and Perspectives

Report of the National Seminar held on 18-19 September 1991
at NIE Campus, NCERT, New Delhi

राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

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FOREWORD

ON 1 September 1991, the National Council of Educational Research and Training (NCERT) completed 30 years of valuable service in the cause of school education in the country. It was, therefore, decided to utilize the occasion to conduct a self-appraisal by examining its contribution towards the achievement of the objectives for which it was established Periodical introspection does help an institution to invigorate its vitality, learn lessons from the past experiences, and prepare a plan of action for the future

To undertake such a self-appraisal and evolve a perspective plan for its interventions in the system, it was decided to conduct a two-day national seminar, organise a one-week open house programme and bring out a publication to highlight the impact of the various programmes and schemes of the NCERT on school education. A number of eminent educationists of the country were invited to participate in the national seminar, deliberate on the problems of school education, and throw light on the perspectives for its reorientation based on the concerns and priorities of our society in the last decade of the present century The NCERT, thus, performed a facilitating role by enabling a 'think-tank' to gain insight into the problems of education, and show a way to the country to overcome them. It was visualised that the outcome of the seminar would enable the educational agencies in the country to refix their priorities and plan their interventions accordingly

To avoid too dispersed a discussion, the theme of the national seminar was delimited to three areas (i) Universalisation of Elementary Education, (ii) Qualitative Expansion of Secondary Education, and (iii) Indian Society and Education with Special Reference to the Education of the Disadvantaged Groups. To ensure comprehensiveness in treatment, three experts in each area were requested to prepare background papers in which they could reflect on current situation, emerging trends and directions for reforms. I must say that much of the credit for the success of the seminar goes to the experts who presented their papers at the seminar. I am grateful to all of them for their cooperation and contribution. I am all praise for the delegates whose interventions made the discussion lively and meaningful.

I place on record my deep appreciation for Prof A.K. Sharma and Prof R P Singh who made valuable contributions to the planning and organisation of the seminar I am also thankful to the faculty members who worked as rapporteurs in various sessions My special thanks are due to Dr G.L Arora who prepared and edited this report of the seminar

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In Retrospect

R P SINGH

TODAY as we look back at school education in the country, the achievements in all directions appear to be significant. More children are going to school, the dropout rates have reduced, more teacher training colleges and departments have been set up, numerous national and state-level bodies have started working in this area, and the social concerns have acquired a more pervasive role In brief, there is activity all around and no area or level or problem seems to have been missed by the eye of the ubiquitous educational planner. Nonetheless, the problems have, in reality, multiplied corresponding to the increased money allocations, research data, voluntary and government agencies involved in this mammoth undertaking called education. Interestingly, in terms of social systems, the class stratification on grounds of income, caste or region has become more blatantly patent, the least audible elements in society have become shrilly vocal or have found their protagonists, the question of equality of educational opportunity has certainly become so complicated that no definitive answers are available, and the growth in media technology has helped to blur the distinction between knowledge and information In fact, while the demand for school education has gradually taken on the attributes of cacophany, its relevance for providing meaning to life and work stands seriously eroded.

We cannot derive any satisfaction from the global unrest and disquiet with educational provision, its quality and quantity and its relevance to individual and society which are being questioned increasingly. Views are available on the very provision of schools which deny their contribution in any sense, except increase of consumerism, and supply of poor quality information. Alternatives are being suggested in India too where the concept of extended classroom via satellite has come to stay Soon, model cassettes, both audio and video, shall be available even in India with standarised lessons in each subject area wherefrom friendly learning situations could be generated

Over a period of time after independence several new dimensions to educational problems have been added It is possible to call them later-day perspectives. For example, it is in the eighties that government started enriching the school curriculum with cultural inputs, yogic studies, value-education, etc or alternatives to formal education were either experimented upon or being discovered. Of late, emphasis on the education of special group children, whether handicapped or gifted, early childhood education, helping the girl child receive education, etc could be noticed among major educational concerns In terms of additional inputs, one could talk of several centrally sponsored schemes or programmes like Operation Blackboard, Programme of Mass Orientation of School Teachers, or establishment of District Institutes of Education and Training (DIETs), strengthening/upgradation of Colleges of Teacher Education (CTEs), Institutes of Advanced Study in Education (IASEs), etc We could not only feel the concern of the Centre to upgrade teachers' skills and information through traditional institutions but enriching classroom instruction through satellite, open schools and universities is only a decade-old addition to the long list of innovative non-traditional institutions The curricula have got modified and evolved into a national framework and special programmes like Computer Literacy and Studies in Schools (CLASS) are symbols of India'a attempt to modernise itself While we have evolved a commonly agreed three-language formula to resolve one of the major tangles of school education, we have developed special programmes to assist Scheduled Castes and Tribes and in fact a few central universities have been set up to meet a few of these requirements. We could say that a multipronged strategy seems to be in operation to evolve curricula, improve instruction, train teachers, evaluate students and assist children to settle in life through vocational training The system, though highly traditional, has accepted innovations in all sectors and given recognition to the most modern concepts and practices The elders and young ones alike have, therefore, started clamouring for more and each segment of society and sector of education is, therefore, crying hoarse for more resource allocations and acceptance as a problem to tackle on a priority basis The effort to do more is now giving place to questioning the 'will' of the people and government to make up for tomorrow's needs India does not wish to go into the twenty-first century as partially literate or educationally ill-equipped. The poverty of resources is no longer as acceptable today as was a few decades back. It would, therefore, be interesting to recall how things/problems have grown over a period of time and in a short period of time (in terms of a nation's life), how impatience has helped transform ordinary classroom instruction into a challenge and provision of a single facility into a national issue

The history of Indian school education has been recorded and is available in books and documents. What one needs to do is to put this question of growth into a perspective Also, one needs to understand that most of the problems have retained their unresolvable character. For instance, we have in the present century tried to come back to the structure and ladder of school education as suggested by the Sadler Commission (1918-19), i e the 10+2 system after having had a minor aberration of the Mudaliar Commission of 11+3 In fact, until we come to the Kothari Commission (1964-66), the system as a whole was rarely viewed in totality but only its parts were the major concerns of the Central Advisory Board of Education (CABE) and other Committees. We have seen why the Sadler Commission talked of the intermediate stage of vocational streaming, and once again via the Malcolm Adiseshiah Committee of the late seventies we have come to square one to regard vocationalisation of education as a significant departure from the earlier practice What one notices clearly are (a) the prestige professional education enjoys against vocational streams, (b) the sacrifice parents are willing to make for their children's education, (c) the growing stratification in society demanding the school to respond appropriately, (d) the alienation of vast masses from education and inadequate appreciation of the meaning and purpose of education, (e) the explicit demand in the form of political movements for the upliftment of backward and scheduled castes and tribes through education, (f) the perception of the government that education is a means for national growth and development and, therefore, its increasing commitment to support equity-based education and, in turn, creating grooves within grooves of the education system, and (g) lately education being perceived as a means of one's investment in future and thus giving rise to institutions set up entirely on business and commercial lines. It would, therefore, be interesting to observe that education is being variously seen as a means of one's class perpetuation, social mobility and also as a means of regarding it a cost-effective industry or commercial enterprise Seldom has the last consideration been missed by the ingenious manipulators.

One need hardly go into the reasons of the mess that has been created as a consequence of the divergence of motives and results education can yield to a discerning group or individuals. From the efforts of the government to see that all get an education, whether through formal, non-formal or distance system, that they remain in the system as long as possible, that teachers become responsive to societal needs, etc , to the private investors to make profits at the cost of the child we have a whole range of varying motives One perceives a whole range of provisions, support systems and arguments for and against an educational issue The most needy are also the left-outs and the rejectees of the system but the government finds it ever so difficult to bring them into the system and retain them despite midday meals and genuine propaganda to project education as a means of one's social and economic development

Against this background it is now clear that while the government is trying hard to help India become literate, the efforts from the side of non-governmental agencies are not wanting The social stratification so apparent in urban centres is not that obvious in rural areas Yet the demand to have more English-medium schools is universal

The obsession with Basic Education, an indigenous evolution of a response to colonial approach to education, continues to provide the mainstay in any meaningful discussion at any level In all its transformations Basic Education has covered a long distance in terms of logic and support Interestingly, we are finding it difficult to discard it on any ground Its simple philosophy and strong psychological bases are as appealing today as they were when the scheme was conceived and launched. Most of our discussion on values in education also derives its support from Basic Education and the Gandhian values of peace, amity, brotherhood, tolerance, equality and respect for all

. We may point out here that the Government of India in its Challenge of Education document admitted openly the failure of the concept of neighbourhood school. Even for such ideologically acceptable institutions that function well in most European countries, in India the difference between precept and practice has remained very distinct

The National Policy on Education—1986 stated clearly· "The new thrust in elementary education will emphasise two aspects (i) universal enrolment and universal retention of children up to 14 years of age, and (ii) a substantial improvement in the quality of education " It also said that "access to secondary education will be widened to cover areas unserved by it at present " Regarding the education of the handicapped, it stated. "The objective should be to integrate the physically and mentally handicapped with the general community as equal partners, to prepare them for normal growth, and to enable them to face life with courage and confidence Education of the handicapped forms part of the education of the disadvantaged groups like women, scheduled castes and tribes and minorities.

It was, therefore, not surprising that on each of these problem areas the Acharya Ramamurti Committee went into an indepth analysis The National Council of Educational Research and Training, on its own, felt legitimately concerned about a few of these problems and thought it necessary to take stock of its own work and seek future directions through the medium of this national seminar

SECTION I

Proceedings and Recommendations

Proceedings

Inaugural Session (18-9-1991)

In his welcome address Dr K. Gopalan, Director, National Council of Educational Research and Training (NCERT), presented a brief resume of the interventions made by the NCERT during the past few years to invigorate school education in the country. He also outlined the activities and programmes which have been taken up by the NCERT recently. He expressed the hope that the conclusions of the seminar would provide an opportunity not only to the NCERT but also to state-level educational agencies to have a relook at the priorities of their work in school education This would obviously help them to prepare a 10-year perspective plan for action

The Human Resource Development Minister and President of the NCERT, Shri Arjun Singh, who presided over the session, complimented the NCERT for celebrating its 30th anniversary in a befitting manner by organising a seminar which would provide not only a perspective for the implementation of various educational programmes in the country but also directions for the activities of the NCERT in the next few years. However he cautioned the researchers and other educational personnel not to get bogged down in statistics and reviews. He exhorted the delegates to identify the real problems of education and evolve effective strategies to implement the programmes outlined by various educational agencies He assured the educational planners that universalisation of elementary education, expansion of secondary education and eradication of illiteracy would continue to get emphasis in the educational plans

In his inaugural address, the Honourable Prime Minister Shri P.V Narasimha Rao stated that it was time that certain radical changes in the area of education were incorporated into the eighth plan document The eighth plan would be a plan for unpopular measures supported by strong political will.

He called upon the youth to equip themselves to accept the challenges and meet the requirements of life through the instrumentality of education He appealed to the academicians to attend to those areas of education which had not received due attention so far. In this context he particularly mentioned secondary education. It is the actual take off stage in one's life By imparting primary or elementary education, we will perform our constitutional duty but it is not adequate to prepare or equip the child to face the realities of life and meet newer challenges. Secondary schools are in fact the backbone of real education because they help in contributing to the wealth of the nation and the world The base of the educational pyramid comprising primary education has been made strong, there is now need to strengthen secondary education so that it leads to excellence in higher education.

Referring to the uneven spread of literacy in the country, the Prime Minister stated that literacy movements should be taken up independently in blocks, instead of having a general approach for the whole country. What could be a relevant cause in Kerala may not work out or have the same impact in Uttar Pradesh or Kashmir. In education there is little relevance of averages by taking the country as a whole because statistics can never present a true picture It is the task of the NCERT and the NIEPA to conduct micro-level studies and prescribe programmes depending on the specific requirements of each region

The Prime Minister called upon the participants to present the conclusions of their discussions and their recommendations to the Planning Commission so that these inputs could contribute to the planning process with regard to education.

The Prime Minister also released two volumes of the "Fourth Survey of Research in Education", which covers the period 1983-1988. Shri Anil Bordia, Education Secretary, expressed his sense of gratitude to the experts involved in the preparation and finalisation of the volumes

The session ended with a vote of thanks proposed by Prof A.K. Sharma, Joint Director, NCERT

Elementary Education (18-9-1991, Morning)

The session on Universalisation of Elementary Education included three presentations These were on (a) Development Imperatives for Universalisation of Basic Education by Prof A.K Jalaluddin, (b) Universalisation of Elementary Education: A Programme for Action by Dr M.P Parameswaran,and(c) Universalisation of Elementary Education by Prof P N. Dave The presentation session was chaired by Shri M R. Kolhatkar The discussion session was chaired by Prof. Satya Bhushan

In the presentations, the duality and social inequities that exist within and across the regions of the country, as far as basic education is concerned, were emphasised. Basic education is co-related with other known indicators of development. The existence of regional and state differences necessitate social and political will for achieving universalisation of elementary education

In the past, mass education has been grossly neglected in the educational planning and implementation There is need to create a demand for primary schooling within the community. In the absence of mass education the rural poor have very little direct access to information regarding opportunities and institutional support available for their participation in various developmental programmes. The need to empower people to ask for facilities for education in order to achieve the targets of universalisation of elementary education was highlighted in this context

Indiscriminate nationalisation of educational institutions has resulted in greater financial commitment on the part of the government to secondary and higher sub-sectors of education to the neglect of primary and upper primary sectors The enhanced educational facilities have been mostly utilised by the privileged sections of society which are now articulating demand for greater provision for secondary and higher secondary education The net impact of these thrusts has been on diversion of limited resources more in favour of secondary education than primary education In view of the limited resources, whereever possible, the government should withdraw from providing for secondary education and make greater provision for elementary education In Kerala community-based indigenous schools and private managements of institutions have not only been retained but also encouraged, providing for larger resources for the primary sector of education.

Uniformity of curriculum tends to provide a uni-directional growth of education leading only to university education As a result, the needs of large sections who do not progress to higher levels of education get ignored. Education should, therefore, be made more learner- and life-oriented

There is need for decentralisation in policy-planning and implementation at the state and district levels. Private and non-governmental initiatives needs to be encouraged to ensure quality in programmes Flexible curriculum design, diversified instructional strategy and decentralised management of institutions are the components of the strategy which needs to be adopted

The qualitative degeneration of the status of education in the country today is deplorable as it alienates people from productive activity and, in the process, it is doing more harm than good. The content and process of education, which is at present uni-directional leading only to the academic stream, needs to be reviewed so that it can cater to the economic realities and demands and be perceived by the community as useful The action plan to be formulated for achieving universalisation of education will have to involve generation of proper climate, teachers' re-training, curriculum adaptation, generation of additional human and material resources besides meticulous planning Teacher preparedness is the crucial element for which measures should be taken to ensure enhancement in their number as well as their levels of commitment and motivation.

More than 40 years ago 'Declaration of Human Rights' had asserted that everyone has a right to education, yet not only in India but in most of the developing countries, stagnation in the primary stage continues to be a phenomenon that needs attention Despite the oppressive and erratic economic and socio-political system, coupled with severe resource constraints, the Indian children at the primary stage are in no way inferior in achievement to any other country in the world. The growth in the enrolment and retention rates in the past few years indicates that change is taking place in the desired direction and benefits have started accruing to the disadvantaged sections of society. However, it may be conceded that while quantitative expansion is evident, many factors have hindered qualitative improvement such as lack of buildings, playgrounds, libraries, inadequate number of teachers, etc. It should be ensured that with a change in the sub-system of education change in the total system is also kept in view. Resource allocation for primary education is not all that inadequate as it is under- or mis-utilised for which it is not the people or the community to be blamed but the state or the government which is the locus of power and control. In the context of the need for basic education and literacy, questions of inequity and relevance of education to the community are important

The following points emerged in the discussion that followed the presentation of the papers

(i) The opinion expressed by the Hon'ble Prime Minister in his inaugural address with regard to the phenomenal growth of primary and problematic growth of secondary education generated animated discussion in the house. There seemed to be an agreement on the point that while expressing the opinion, the Hon'ble Prime Minister was only trying to highlight the need to devote serious attention to the problems of vocationalisation and diversification of secondary education without in any way undermining the importance of primary education It was felt that in spite of this understanding of the remarks, it would be desirable to emphasise that although the need for providing elementary education to all the children, as per the directive principles of Indian Constitution, was well realised and considerable progress in the achievement of the target had been achieved, the goal was not yet reached and considerable efforts would have to be put in to finish the unfished task. The house felt that bringing in those who were still out of the system presented the hardest core of the problem in the area For this purpose not only the efforts currently being made would have to be strengthened but new and innovative initiatives would have to be mounted to reach the goal The house felt that primary education should not only continue to get the importance as at present but should stay at the centre stage in the total strengthening of the educational system in the country.

(ii) Realising that growth of elementary education was positively correlated with growth in other sectors of development like health, roads, drinking water facilities, electricity, etc , there appeared to be an agreement on educational growth being interlinked with growth in other development sectors Facilities for health and better living needed to be provided along with provision of schooling facilities to derive optimal benefits from such investments The sectoral approach in planning being followed at present would need to be replaced by intersectoral coordination process There was also a broad agreement on the need to make a shift from macro-planning to micro-planning so as to meet the specific needs of specific areas This, it was felt, would need decentralisation of the planning and administration process as aggregates and averages could not truly reflect the needs of different areas and people

(iii) It was felt that undue stress on everything by the government leads to resource constraints, on the one hand, and loss of people's enthusiasm for participation in the programmes, on the other. It was, therefore, suggested that there should be ample scope for mobilisation and utilisation of local resources in the promotion of educational programmes The setting-up of local education committees could be a significant step forward in this effort

(iv) The inter-state and intra-state disparities highlighted by the speakers elicited a strong reaction in the house. It was felt that most of the educationally backward states need to be made responsible for their failures in achieving the UEE targets A process of providing incentives and disincentives to the states has to be established to achieve this goal

(v) The trends presented by the speakers revealed the need to lay greater stress on the education of the girl-child. There was agreement on the point that in this decade of the 'Girl-Child' stress needs to be laid on providing for the education of the girl-child which would automatically meet the needs of the other deprived sections of the society

(vi) The importance of teacher motivation was stressed by a number of speakers. It was felt that irritants and hardships in the service conditions of the teachers need to be removed. Decentralisation of the planning process must revolve around the teacher rather than over the teacher.

(vii) There was agreement on the point that elementary education needs to be made responsive to local needs and conditions. This would entail flexibility in curriculum planning and implementation. Local communities with the help of the teachers could bring about suitable changes in the teaching-learning process to encourage effective learning on the part of various categories of learners In such a situation the focus on programmes of non-formal education would need to be particularly reviewed Facilities for learning would need to be matched to the extent of deprivations of the different segments of the population so as to overcome the effects of deprivations. This would entail greater provision for primary education, in general, and non-formal education, in particular

Secondary Education (18-9-1991, Afternoon)

Three papers on the qualitative expansion of secondary education were presented by Shri T.V. Kunnunkal,Prof.Sukumaran Nair and Prof.D.B.Desai. The session was chaired by Prof. Satya Bhushan. Concern for improvement in the quality of secondary education along with quantitative expansion was voiced by the speakers However, the three speakers had different perceptions regarding specific approaches or strategies for improving the quality of education. In a way the three papers are complementary to one another The ideas presented in the papers along with the interventions made by some of the delegates provide an agenda for ensuring quality in secondary education. It was agreed that quality has become a critical issue Therefore, there is a need for pinpointing its variables from the numerous research studies that are available on this topic

Quality in education can be defined in many ways and from many perspectives In situations that obtain in our country, with wide regional disparities, the twin criteria of efficiency and equity are essential to understand the question of quality. These will lead the system to perform its expected function—that of producing human beings with the necessary knowledge and skills which, in turn, will enable them to perform ideally and optimally in all sectors of life

The following parameters were identified for the formulation of perspectives or strategies to improve the quality of secondary education:

(i) Curricular policies
(ii) Textbooks and other instructional materials
(iii) Teaching process
(iv) Evaluating learning outcomes
(v) Teacher preparation and recruitment
(vi) Management system
(vii) Promoting research and innovations
(viii) Infrastructural facilities

(i) There is an urgent need to evolve a national curriculum policy for secondary education, for the implementation of which the Union Ministry of Human Resource Development, the National Council of Educational Research and Training, and other national and state-level agencies should play their respective roles effectively The national policy should include details regarding scheme of studies, medium of instruction, instructional strategies, level of achievement expected, evaluation, etc It should also envisage integration of curricular and co-curricular areas Minimum levels of learning in each subject at the end of different grades of secondary education need to be specified and all the students should be helped to reach the specified level It has been pointed out that secondary education is the right stage for introducing diversified curricula so that the secondary stage proves terminal for majority of students. But the introduction of vocational courses has suffered from attitudinal barriers along with lack of proper coordination and linkage between vocational education and manpower planning.

The framework of national curriculum for elementary and secondary education developed by the NCERT suggests that curriculum areas like work experience, health and physical education and art education be made an integral part of school curriculum and should be accorded the same status as is given to other subjects like science and mathematics But some of the delegates pointed out that these areas are still neglected in the school system There is urgent need to look into the factors responsible for the low priority assigned to them and to initiate appropriate measures to rectify the imbalance in the curriculum Attention was also drawn to the importance of yoga education and value education

A number of teachers and parents have the perception that the present curriculum puts too much burden on the students. This should be looked into It is not a wise policy to start with the curriculum of Class XII, and then move backward to lower classes Undifferentiated curriculum needs to be introduced for boys and girls Provision for the teaching of science, mathematics and physical education must be made in all girls' schools

(ii) Regarding textbooks and other instructional materials, it was felt that the NCERT has made significant contribution by bringing out model textbooks of high quality The textbooks have become more and more interactive and thus they tend to become teachers in print

The NCERT should concentrate on developing model instructional materials/packages, both for formal and non-formal education, based on research and experimentation Such materials would prove useful for curriculum framers and textbook writers at the state level There is need to make concerted efforts to produce children literature of high quality

There is need to further strengthen the NCERT to enable it to perform its functions more effectively.

(iii) There is agreement among educationists and teachers that mere enrichment of content of education or preparation of quality textbooks will not lead to improvement in the quality of secondary education, if qualitative changs are not brought about in the teaching process The present scenario of school teaching is one of lights and shades. The numerous shortfalls of the system include traditional teaching of mother tongue in which skills like creative communication and pronunciation are generally neglected. Mathematics and science are taught like history or social studies Scientific principles and mathematical theorems are presented in the verbal form, without giving the pupils opportunity to internalise the meaning of what is presented. In short, the whole teaching-learning process in our schools degenerates into a cheap exercise in information mongering

The following broad parameters provide directions for the improvement of the teaching-learning process

(a) The aim of secondary education is not to store knowledge in the mind of the student but to cultivate his mind so that he learns how to learn.

(b) The single-medium teacher needs to be replaced by a multi-media teacher. This means auditory teaching needs to be supplemented by visual presentation

(c) Reducing teacher talk to the minimum and promoting interaction and dialogue among the students and the teachers

(d) Helping the students to exploit different resources to learn on their own

An elaborate action plan will have to be developed to enable in-service and would-be teachers to reorient their teaching in line with the directions indicated above.

(iv) Our educational system is dominated by the examination system. Hence improvement in the quality of examination will lead to improvement in the quality of education Examination should be used more as a diagnostic or as a formative instrument than merely or mostly as a summative or judgemental device. Examination reforms must be implemented as a package which should include introduction of semester system, continuous internal evaluation, movement from one stage to another stage through an entrance test, modernisation of courses and provision for credit accumulation As national certification is expected to standardise and control the quality of educational operations in the country, institution of national level examinations can be considered.

It was reported that in some parts of the country, the students were resisting the introduction of internal system as it could be misused by the teachers and other authorities. Therefore, a better alternative would be to improve external examination by developing question banks and administering questions to the students randomly. The credibility of external examination is also questionable. Therefore, it would be better to introduce internal assessment with in-built safeguards to avoid its misuse.

In the present system of examination, only written communication is assessed Oral tests should also be used wherever necessary.

(v) The teacher is the most critical input for improvement of the quality of education. To raise the competence level of the teacher, the system of teacher education in the country will have to be revamped. The duration of pre-service teacher education may be lengthened and diversified teacher education programmes meeting the demands of different stages of school education and different subject areas should be designed and implemented. To apply quality control over teachers' colleges, the National Council for Teacher Education (NCTE) should be immediately given necessary powers. Teacher preparation programmes through correspondence should be stopped. In the teachers' colleges teacher-educators must practise what they preach in their classes. For this purpose, in-service courses for teacher-educators will have to be instituted.

Admission to teacher education courses may be made on the basis of suitably designed selection tests

Practice teaching is the weakest area in the teacher education programmes. It needs to be remodelled

With a view to matching the demand and supply of teachers, there is a need for manpower planning in the field of teacher education

The teachers may be selected first and then imparted professional training as suggested by the Ramamurthy Committee

Completion of in-service training courses for different levels may be linked with sanctioning of additional increments and promotions

Focussed in-service programmes will have to be planned to meet the requirements of the national curriculum and the national students. DIETs and CTEs should be equipped in such a way that they are able to take care of the in-service education needs of the teachers Distance Education mode may also be adopted for in-service education with the help of the Indira Gandhi National Open University (IGNOU) and other open universities Every teacher should be expected to undergo such short term courses periodically Incentives in the form of increments and promotions should be provided for completing in service training courses.

In every school, a librarian, a counsellor and a yoga teacher should be provided

(vi) Educational management is very crucial for improving the quality of education It is often pointed out that we do not have a scientific system of management Instead we have only crisis management Educational management will have to be decentralised, not merely from state to district, but coming down to the grass-root level, namely, an educational complex supervised by a duly established local management An educational complex may be granted autonomy as is envisaged by the University Grants Commission (UGC) for colleges.

To solve the problems of equity and efficiency, discipline will have to be enforced in the system At least the schools should function for the number of days prescribed and the teachers should be in the class when they are expected to be there

To make the functioning of the system effective, the school and the community need to be brought into close partnership Local education authorities should be set up to enable the community leaders to participate actively in guiding, directing and supporting school activities. However, in this context, it is worth noting that the teachers do not like to be administered by local people. They find it safe to be administered centrally.

The Heads of private schools have more powers and freedom to innovate, experiment and implement reforms in school education Such powers should be given to the Heads of government schools also so that their functioning also improves.

Every institution should be encouraged to adopt a system of self-appraisal Every institution and every individual working in the system should be made accountable for their non-performance or inadequate performance. In this context the importance of institutional planning and management can hardly be exaggerated.

Special attention is needed for improving the classroom climate which should be characterised by cordiality of relationship between the teacher and the students. Learning is possible only in such an environment Corporal punishment should have no place in the system.

(vii) The education system in the country has, by and large, shown resistance to the adoption of innovations The teachers who understand the importance of educational innovation are few It has been observed that a very small number of teachers who are engaged in research do so generally for improving their academic credentials and they are seldom motivated by the zeal to solve the 'real' problems they face in the teaching-learning situations and other related professional obligations There is a need to popularise 'action research' among the practising teachers.

The SCERTs and other state-level educational organisations should also develop expertise to prepare relevant and need-based curricula, instructional materials and teaching-learning strategies based on research and innovations.

(viii) The designing of a perspective plan for improving the quality of secondary education would require identification of some minimal school facilities in the form of buildings, laboratories, libraries, play-grounds, workshops, audio-visual centres, sanitary facilities and a range of equipments like radio, audio-recorder, video-recorder, personal computers, sports materials, laboratory equipment, workshop tools, and agricultural equipments A time-bound programme for providing adequate infrastructural facilities in the schools may be prepared.

The states may be asked to ensure provision of minimal infrastructural facilities in all schools. In order to mobilise funds, we may think of raising a part of it from the community, including the parents of the students. The state governments may also consider the feasibility of levying education cess for this purpose

Indian Society and Education of the Disadvantaged (19-9-1991, Morning)

Three papers on the theme "Indian Society and Education with Special Reference to the Education of the Disadvantaged Groups" were presented in this session by Dr Deoki Jain, Prof P.C Joshi and Prof. N.K Jangira. The session was chaired by Prof Yogendra Singh

In their papers, the speakers made an attempt to articulate the needs and problems of all types of disadvantaged children—girls, scheduled castes, scheduled tribes, and children with various disabilities. The common refrain of the papers is that the disadvantaged or the under-privileged children continue to miss adequate opportunities for access and success, despite the availability of resources The loss to them is perhaps due to the lack of social sensitivity, insufficient attention within the educational system, and uppreparedness of the teachers to deal with their cause comprehensively.

The authors suggested that in the democratic system the basis of education should be the recognition of the rights of the weak to be respected and protected by the strong. This should lead to a situation where the non-attending or even the non-benefitting child would not be left out but carried forth to grow and learn with the help of social and educational workers The observations made in the papers reflect a search for social amelioration of the weaker sections of Indian society at both micro- and macro-levels Education is considered as only one plan of the proposed reform

The policy-makers, pedagogists, educational administrators, non-government organizations, welfare departments, and all those who are interested in working for the child in one way or the other, have to come together and shed some of their illusions about the socio-cultural and educational background of the disadvantaged children and develop empathy for them in the first instance. The oft-repeated constraints offered as an apology for their poor participation rate are now becoming myths in terms of the perceptions and expectations of the proposed beneficiaries, i.e people living in rural and remote areas, ethnic groups, minorities, scheduled castes and scheduled tribes, and disabled These people are bewildered to find that instead of addressing curriculum to their specific needs and adjusting it to their life styles, the education system drags them on to a hypothetical curriculum drawn on the needs of an average Indian child—a mix of the rural and the urban, the elite and the poor, the full-time participant and the non-attending and non-participating child This requires to be shed off The life-styles of these children in micro-level situations should form the basis of identifying their learning needs. In this context the policy of categorisation and grouping needs to be replaced by decentralisation and individual attention. In most cases the children born in difficult population contexts are called upon to learn survival skills from their parents, and skills and competencies related to their futuristic educational needs from the teachers This ends up in an unforeseen conflict where the parents opt for taking their children out of the system. The drop-out phenomenon is more a push out phenomenon due to the failures in curriculum transaction. The policies of the government and the grants-in-aid schemes do not seem to be concerned with the heart and mind of the disadvantaged.

It is interesting to note how educational disadvantages keep on accumulating, e g. to be born a girl is a disadvantage in itself; to be born in a poor family, a scheduled caste family or a scheduled tribe family makes the girl child doubly disadvantaged and to be born with an impairment further accentuates her disadvantage Where is the training or orientation for the teachers and educational workers to deal with multiple disadvantages? How are they to be oriented for developing awareness, let alone commitment? In what way are they equipped for disgnosing the learning difficulties of the less articulate, the poor and the deprived ones?

After taking into account a large number of evidences, the authors concluded that the rate of participation of the disadvantaged in the education system was very poor. A number of interventions are required to improve the situation. Social empathy, on the one hand, and the teachers' goodwill, on the other, are essential ingredients of teaching-learning strategies. Heart-searching and research into the phenomenon of learning situations, teaching conditions, and classroom interactions may contribute in finding a solution to the problem. Educational climate within the social environment of the disadvantaged learners needs to be built up

The following points emerged from the presentation of the papers and the interventions made by the delegates:

(i) Micro-level planning not only for difficult geographical areas but also for different groups identified as disadvantaged should be the strategy during the 1990s It should seek the involvement and participation of the community at the grass root level and the groups needing empowerment.

(ii) The desegregated curriculum and teaching should be the focus of research, training and extension activities of the NCERT and other educational institutions.

(iii) Schools and classrooms should be re-organised for education for all including children with social disadvantage and with physical and intellectual impairment A pedagogy for meeting individual needs in the hetrogeneous classrooms needs to be identified and developed in the Indian context on priority basis. Child-to-child help in learning, peer tutoring, parent-partnership and such other teaching-learning interventions can assist the teacher a great deal in meeting the needs of individual children in large size classes and multi-grade teaching situations

(iv) Organizational changes in schools, classroom management, preparation of schedules should also be planned, e.g. furniture designing and seating arrangements will have to be done in a much different way than is done at present to provide flexibility in curriculum tmasaction involving a variety of actions.

(v) Neo-pedagogy requires a radical change in the context of pre-service and in-service education of teachers in terms of content, methodology of training and then for transfer of training to actual classroom practice. This process of reform in teacher education is a key to the transformation of the process of teaching in schools

(vi) With millions of in-service teachers to be oriented to neo-pedagogy, tele-school, distance education modality on the pattern of tele-school are special education systems, backed by supporting print material, which needs to be conceptualised. Its effectiveness in bringing about change in school practice will have to be closely monitored.

(vii) Some disadvantaged groups have accumulated backlog in education because of late start, such as girls and disabled children They have been brought within the fold of the movement for equal educational opportunity in the system only in the last few decades. Special resource allocation, therefore, is called for to meet the special needs of the accumulated backlog among these groups.

(viii) Adjustment of curriculum planning and transaction modalities to the life-styles and learning skills of the disadvantaged groups should be the priority of research and developmental activities

(ix) Literacy and education are the instruments of social transformation and economic amelioration. These could lead to empowerment of the poor at least to a level where they become aware of their rights The vested interests might counteract the planned efforts. Peoples' movement, mass-awareness campaigns and participatory programmes need to be planned to give impetus to the educational progress of the disadvantaged

(x) Gandhian pedagogy centring round work-oriented education leading to self-sufficiency and self-reliance at institutional level still seems to be a relevant model of education. Such a model ensures equity and mutual respectability, which have become very necessary in the growing industrial social order.

(xi) Despite the fact that there have been efforts to deal with the education of the disadvantaged groups in an effective manner, there is still need for orienting the educational planners, administrators and teacher-educators with regard to the significance of care and education of the girl child particularly of the weaker sections, scheduled tribes, slum dwellers, and those living in rural areas. A series of such programmes as have the potential to fulfil the objectives of education need to be conceptualised and implemented

Valedictory Session (19-9-1991, Afternoon)

The closing session of the seminar was chaired by Dr K. Gopalan, Director, NCERT The Rapporteurs for different sessions presented their reports based on the presentation of the papers and the discussions that followed. A few additional observations were made by some of the delegates. The sub-committee appointed for drafting the recommendations of the seminar summarised the points on which consensus had emerged

Prof. R.P. Singh proposed a vote of thanks to the experts who had contributed papers, and to the delegates He also thanked the rapporteurs and members of the staff of DTESE&ES for their contribution in the successful organisation of the seminar He expressed the view that the seminar had succeeded in achieving its objectives

Major Recommendations

The seminar made the following major recommendations:

1 Elementary education should continue to call for maximum attention of the nation today Within elementary education there is urgent need to identify special groups and geographical areas which require provision of compensatory allocation of resources In this context the rural girl child and the rural and urban poor constitute priority target groups

2 The task of halting and reversing the processes of temporal and spatial stratification of educational disparities, which have taken place between and within the different regions in the country during the past forty years or more, should receive immediate attention at all levels of policy formulation, planning and implementation of new educational development programmes.

3 Education and development should be seen together, particularly when it is addressed to the girls and the poor in rural areas Social and institutional support should be provided in the form of civic amenities, employment, minimum social security, drinking water, fuel and fodder so that the girl child could be freed from domestic chores which keep her away from participating in elementary education

Restructuring of wages and implementation of land reforms are necessary to create a favourable environment for the participation of children belonging to the most disadvantaged sections of the rural population in elementary education

4 Since the growth of elementary education is positively co-related with the expansion and utilization of infrastructure in other areas of economic and social development such as health services, electrification, surface transport and communication facilities, serious efforts should be made by the government to involve relevant development sectors not only in the formulation and implementation of programmes related to universalization of elementary education, but also for providing additional resources

5. The task of improving the outreach and quality of elementary education could be thought of in three different directions, namely, decentralisation, diversification and flexibility Decentralization has been given due

impetus in the National Policy on Education (NPE) 1986 and its Programme of Action (POA) However, the District Institutes of Education and Training (DIETs) and the District Boards of Education (DBEs), which were to become effective instruments for the qualitative improvement of elementary education, have not taken the shape as initially conceptualised Immediate steps should be taken to strengthen and reorient the DIETs and make them statutory district nodal points for implementation of the academic aspects of the new policies and programmes.

6 The Zilla Parishad and other tiers of the system should become the local bodies responsible for the implementation and monitoring of the programmes of educational development For this purpose, the Panchayat Raj System should be reviewed and revitalised

7 Preparation of instructional materials should be diversified to include local experience and inputs, but within the framework of the national curriculum. This necessitates development of technical competencies at the local level that will eventually help in giving value orientations while strengthening the cultural and social contexts of curriculum inputs The DIETs can play a vital role only when they are given the required status and responsibility

8. As multiple agencies operate at the district level in the field of education and other areas of development, which have an important bearing on education and training, it is necessary to initiate immediate action for the establishment of District Boards of Education as envisaged in the NPE—1986 and give them the status of nodal agencies responsible for the planning and management of elementary education

9. Secondary and higher sectors of education, where people can afford to pay, are highly subsidised. In view of the present constraints of resources, there is need not only to protect the resources available for elementary education, but also to ensure their optimal utilization for consolidation and qualitative expansion. The higher sectors of education should be required to mobilise additional resources essentially from their own beneficiaries.

10 Resources are to be seen both as monetary and non-monetary. There are several areas where quality could be improved without monetary inputs. For example, participation of the local community in the supervision and management of the schools and in providing inputs for improving classroom teaching may improve the quality of education without any additional expenditure. Similarly, human resources locally available with the various developmental and voluntary agencies may also be exploited for this purpose

11 The whole area of teacher development and training for elementary education deserves more attention Elementary teacher training programme so far has been tied up with the education departments and their directorates.

The entire infrastructure for elementary teacher education should be revitalised with direct linkages with the technical support structures available with universities and other governmental agencies involved in educational innovations in their respective regions

12. The quality of elementary education should not be seen in isolation from that of education at other levels. There is need to prioritise quality improvement programmes in other sectors of education as well

    The question of diversification of secondary and higher levels of education becomes important from the point of view of their qualitative improvement and greater relevance to national development The curriculum restructuring at these levels provides greater scope for introducing and designing diversified educational programmes at the lower levels

    For the large number of children who do not go beyond the elementary level of education, the validity of the curriculum at this level should be seen not only in terms of its relevance to secondary and higher education, but also to life, the world of work, environment and further avenues of life-long education.

13. Quality is a critical issue so far as secondary education is concerned. Apart from consolidation of secondary education, its qualitative expansion calls for a thorough re-orientation of its content and process Expansion of secondary education would also require development of appropriate open learning systems, apart from renewed emphasis on producing high quality children's literature

14 A national curriculum policy for secondary education should be evolved and urgent measures taken to rectify the existing imbalances in the curriculum. The present curriculum puts too much a burden on the students This aspect should be rationalised

    Lately, there have been several pressures on the secondary curriculum to include topics such as remote sensing, consumer education, productivity education, standards education, value orientation, and computer education This situation calls for a fresh look at the curriculum of the secondary stage of education It is impossible to include in the curriculum all that needs to be learnt Any valid approach to education must encourage development of motivation and skills for continuous independent learning.

15 Quality cannot be divorced from the question of equity, particularly in view of the qualitative expansion of secondary education. Although secondary education is the right stage for introducing diversified curricula, there is a realization that separate vocational streaming has not served the purpose from the point of view of equity There is, therefore, need to give a totally fresh look to the whole concept of vocationalisation of education

16 The whole teaching-learning process in our schools degenerates into information transmission and this needs to be corrected Minimum levels of

learning in each subject at the end of each stage of secondary education may be specified, but it should be kept in view that at this stage the main concern is widening the knowledge base of the learner

Curriculum areas like work experience, health and physical education, and art education should be made an integral part of the school curriculum and accorded the status of parity with other subjects. Yoga education and value education are to be suitably integrated into the curriculum

17 Examination reforms must be implemented as a package which should include introduction of semester system, continuous comprehensive evaluation and provision of credit accumulation

18 Electronic media and modern developments in educational technology have profound influence on educational programmes Introduction of computer education should be rationalized and linked with the school curriculum as indicated in the NPE -1986 A fresh look at the approaches to, and strategies for, computer education is also called for

19 The leadership role of the Principal is very important Similar to the managing committees of public schools, it will be relevant to have governing bodies for government schools, which should oversee the performance of the schools and apply timely correctives Educational management should be decentralized to the extent possible

20 The teacher continues to be the most pivotal link for any educational transformation Qualitative improvement and upgrading of teachers through distance learning and multi-media mode should receive deeper consideration

The duration of teacher training also needs reconsideration as one-year teacher education is found to be inadequate for development of skills and values vital for the teaching profession

Grant of statutory status to the National Council for Teacher Education (NCTE) should provide the basis for maintaining norms and standards in teacher education

21 Education of disadvantaged children continues to suffer from inadequate access and success despite availability of resources. This is mainly due to lack of social sensitivity, insufficient attention within the education system, and unpreparedness of teachers to deal with their needs comprehensively. Instead of addressing the curriculum to the specific needs of these target groups and adjusting it to their life-styles, the education system tags them on to a hypothetical need-based curriculum drawn on the average Indian child—a mix of the rural and the urban, the elite and the poor, the full-time participant and the non-attending part-time participant

A pedagogy for meeting individual needs in the classrooms with a wide range of heterogeneity needs to be identified and developed in the Indian context on a priority basis For example, child-to-child help in learning, peer tutoring, parent-partnership and teaching-learning interventions can assist the teacher a great deal in meeting the needs of individual children in large size classes and multi-grade teaching situations.

22. Micro-level planning not only for difficult geographical areas, but also for different groups identified as disadvantaged, should be the goal of the 1990s. Such planning should seek the involvement and participation of the grass-root community and the groups needing empowerment
23. Educational planners, administrators and teacher-educators should pay special attention to the care and education of the girl child particularly of the weaker sections, ethnic groups, slum dwellers, and others living in rural areas. A series of programmes should be conceptualised and implemented to ensure proper blossoming of the girl child.

SECTION II

Background Papers

Developmental Imperatives for Universalisation of Basic Education

A K. JALALUDDIN

THE 1990 Jomtien World Conference on Education for All has brought the task of universalising basic education to the centre-stage of educational development in the developing world. It is on the foundation of a well defined minimum level of literacy and numeracy and a relevant body of knowledge, skills and attitudes that opportunities of further learning of individuals, their quality of life and the overall development of a nation depends Basic education broadly defined as primary education—both formal and non-formal—and adult literacy is now recognised as a fundamental human right the world over It is not something to be chosen or picked up but something to be guaranteed to every citizen by every nation Methodologically, the goals of universalisation of basic education take into account both the quantitative and qualitative dimension of basic learning needs.

Psychological and sociological research, both in India and abroad since the 1960s, reveals marked disadvantage in many children and adult learners in the use of language, in concept formation, in self-expression and motivation There is a widespread feeling in the country that the present content and process of basic education have, by and large, failed to develop in the learners the abilities to use available knowledge, information and skills in new ways, the capacity for sustained hard work, respect for truth and honesty, concerns for others, and, above all, mental and psychological self-reliance, which are vital for giving a fundamentally new orientation to the all-round national development

Education in all countries is being called upon to solve problems of social and personal adjustments mostly created due to the globalisation of economy and internationalisation of labour market in the wake of rapid technological change. The problem of transition of India from a major traditional to a modern economy has already put much greater stress on the national system of education In addition, the change brought about in education since Independence has accentuated some of the problems of mismatch between education and development. Though the demands made upon schools are greater than before, the proportion of the total educative process assigned to the schools is rapidly diminishing when measured against external influences and new opportunities of learning.

Seen from the point of view of giving a new orientation to economic development as it is reflected in the new economic and industrial policies of the government, it is increasingly considered necessary to link economic development with human endowment, social attitudes and political culture. Capital formation, in fact, includes investment in skills, education and health, cultural, social and demographic conditions. Technical discontinuities, as are faced today in India, demand diffusion of new technical knowledge and skills and formation of new labour skills

Due to the dichotomy inherent in the historically received system of economic development in terms of growth and equity, India is caught up in a socio-economic dualism The growing property inequity with a generally low level of income and consumption contains a volatile force The constant or even declining share of the lower groups in the aggregate income stands out more glaringly in the midst of the present rate of general economic growth

Along with under-consumption, under-nourishment and poverty, the problem of unemployment and partial employment is one of the pivotal social problems in the country. A considerable part of the labour force does not possess the skills required by the discipline of modern production. This is also partly resposible for low productivity and high cost-output ratio in all the sectors of the economy.

Much of India's progress in the different spheres of development in absolute terms gets diminished in importance when its impact is interpreted in terms of the gains per capita The fertility behaviour of the population and their access to, and participation in, health and educational facilities also reflect the dualism mentioned above. While India's performance has been slightly better in relation to the internationally defined Human Development Index compared to the GNP per capita, both of these indicators are yet too low for India, as the country is grouped with the least developed countries of the world.

While there are positive indications that the expansion of opportunities for basic education in the country has significantly promoted the process of economic development through the provision of foundation of higher and specialised education for a small section of the population who could afford to avail themselves of such opportunities, the system of education has, by and large, failed to involve the lower income strata of the society in a meaningful learning process. The dualism in the system is not only reflected in inadequate participation of the low income groups and the socially disadvantaged, but also in terms of the quality of basic education received by them

The socio-economic dualism is also reflected in the spatio-temporal stratification of disparities between and within the different regions of the country. Educational backwardness has emerged as one of the major indicators of socio-economic backwardness of districts and states and in respect of caste based communities. The present low level of literacy among the women in the country also reflects the level of gender inequity in the country in spite of women's increasing participation in independent income-generation activities

Emerging Learning Needs

It is now widely agreed that the thrust of any campaign for basic education in the present context in India for all practical purposes is to be addressed to the bottom thirty per cent of the population who are mostly concentrated in rural areas, and girls and women in general Except the tribal pockets in the plains, the above populations are evenly distributed with the rest of the population Therefore, any effort to improve the opportunity for participation and the quality of basic education for the above target populations can be operationalised only across the board along with the general run of primary and upper primary schools, and adult education centres

The path of development that India adopted in the fifties, as reflected in the approach to the Second Five Year Plan, highlighted the importance of diversification of the economic pattern. While attributing the "low static standard of living, under-employment and unemployment and, to some extent, the gap between the average and the highest incomes" as characteristics of an economy depending mainly on agriculture, the policy reiterated its faith in rapid industrialisation as the core of development Since then agricultural programmes have been conceived and implemented as an aid to the process of growth through industrialisation rather than as an integral part of the growth process There has been very little actual realisation that the potential thrown up by the new technologies depends, among other things, on the motivation of the farmers to put their land to the best use, and to make optimal use of modern technology and the inputs associated with it for raising the crop yield. The importance of the human factor in the development process and, for that matter, the importance of mass education, has been grossly neglected in the strategies adopted for economic development.

The agrarian relationship between the landowners, tenant farmers and agricultural workers, which is generally personalised and exploitative in character, has been found to be undergoing qualitative change with the accelerated economic and educational development in the agriculturally advanced regions and the fast-growing rural growth centres Unlike the master-servant relationship existing between the landowners and agricultural labourers in the backward areas, here the relationships are more formal and commercial in nature The market-oriented farming in the advanced areas gives rise to new opportunities for skill development and occupational change to the landless and agricultural workers It is significant to observe that the shift to non-agricultural professions is more pronounced in the case of workers with eight years of schooling. Fifty-two per cent of such workers were engaged in non-agricultural professions in 1981 (Census, 1981)

Many occupations in India are caste-based. The social and cultural traditions often act as de-motivating factors in the case of individuals who receive opportunities of opting for non-traditional occupations Exposure to basic education prepares a person intellectually and emotionally to make appropriate choices The rural poor has very litle direct access to information regarding the opportunities available for their participation in various development programmes and the institutional support available through such participation. Basic education, which develops articulacy in a person along with his or her access to written communication, goes a long way in improving their initiative or drive for self-directed development and participation in non-traditional activities

One of the major causes for the disintegration of the traditional structure of the rural economy without resulting into an appropriate trade off in the secondary and tertiary sectors of the economy in India, as it happened in some of the new industrialising countries, could again be found in the lack of cognitive skills and attitudes of the working population to adopt new techniques and processes

For those who adopted new processes and have been able to improve their production in the household and unorganised sector it is the problem of marketing of their produce and products, and their entering into the new world of competitive commercial transactions from a tranditional agrarian background posed the second order problems of transition. Inadequate inter-personal, social and communication skills make the first generation of rural entrepreneurs vulnerable to the well-known problems of failure As a result, they very often tend to switch over to their traditional occupational areas in search of social and economic security even at the subsistence level The present mode of distribution of subsidies and loans seems to have strengthened their psychology of dependency on the state and bureaucracy.

The general level of education among the work force in the country is still very low More than two-thirds of the male and ninety per cent of the female workers in the rural areas had less than primary level of education in 1981 (Census, 1981) The situation is somewhat better in the urban areas, where 62 per cent female and 35 per cent male workers were without any educational attainment As a result of the existing low level of education among the workforce, the pace of job mobility in the country is also very slow; the majority of workers continue to stagnate at the subsistence level This also poses serious difficulties in the modernisation of the processes of production both in the organised and unorganised sectors.

In the rural areas, the low proportion of workers with basic education of certain quality has apparently slowed down the pace of development of household industries, trade and commerce, transportation and other technical skill-based service activities The catchment areas of manpower for these activities are predominantly urban and semi-urban areas and industrial townships, which is one of the major reasons for the migration of the educated population from rural to urban areas causing internal brain drain. Without a massive effort to generate the skills relevant to the non agricultural trades along with basic education within rural areas, the present migration pattern can hardly be reversed or even slowed down.

Researches provide strong evidence to support that basic education served both to reinforce inequalities in income and social tension as well as to reduce it. As the socio-economically advanced sections of society enjoy greater opportunity of basic education through comparatively greater participation in better quality schools, they tend to consolidate and often enhance their social and economic status through education, when the opportunity of similar kind of basic education is grossly limited in the case of backward communities.

The rising tension in rural areas in the northern region of the country is essentially due to the consolidation of the social and economic position of the landed peasantry and their reluctance to concede to the genuine demand of share-croppers and agricultural workers. As they mostly happen to be illiterate and unorganised, their due share in the form of enhanced wages and social security, and in some cases their rightful possession of the land distributed to them under agrarian reforms is denied.

When basic education of comparable quality is made available at a much faster rate to the educationally backward communities and various incentives are provided for their greater and spontaneous participation in basic education, these communities tend to acquire access to higher earnings at a faster rate and to organise themseves to assert their social and political rights as it happened in some southern and western regions where land reforms also accelerated the process of empowerment of the poor. However, in the absence of genuine land distribution to the landless and spread of education, the situation gradually becomes more tense, verging on violent confrontation between the rural poor and the landed peasantry as it is the case in most educationally backward areas.

Much of India's progress in the modern sectors of the economy, infrastreture and urbanisation has accompanied the faster growth of secondary and tertiary levels of education compared to elementary education, investment in science and technology, and large scale investment in the public sector. On retrospection it is evident that this has happened partly at the cost of basic education of the masses and human capital formation for the broader spectrum of development at the grassroots. While several attempts have been made to correlate the planning process with social policies, including education policies, these exercises essentially have remained disjointed and sectoral.

Parallelism in Economic and Educational Development

The vastness of the country and the low level of national income have made the Indian economy slow-moving and greatly dependent on the internal market mechanism than on foreign trade for boosting production The process of growth has also partly been circumscribed by a sincere desire on the part of the country's leadership to balance growth with equity within a democratic framework The process of planning and the expansion of the public sector to a dominant position initially proved to be helpful in creating a widespread infrastructure and base of heavy industry badly needed for the country's independent economic development. The social orientation given to the banking and other financial institutions in the public sector also, to a great extent, facilitated the process of employment generation and income distribution The comparatively high rate of public savings in India also made the country till recently less dependent on external borrowing and foreign debt.

However, the protected environment in which both the public and private sectors were allowed to grow and the excessive regulatory function played by the state made the participation of people, non-governmental agencies, entrepreneurs and local communities in the process of development more and more difficult.

The government policy, both at the Centre and in the States, of large scale and indiscriminate nationalisation of educational institutions created a similar adverse situation in the education sector. The chronic shortage of funds for education and increasingly greater financial commitment on the part of government to the secondary and higher sub-sectors of education ultimately slowed down the pace of expansion and qualitative improvement of primary and upper primary education, particularly in rural areas.

The process of rapid expansion of the public sector created new social and political conditions in the country The organised workforce mostly concentrated in urban areas and industrial and mining sites soon found themselves in a much greater bargaining position. In the absence of a countervailing force from the unorganised and rural sectors, any added concession to the organised sector slowed down the growth of infrastructure in the traditionally backward areas and the necessary improvement in the efficiency of the existing infrastructure

By using the single-year age-group data of the 1981 Census, one arrives at the conclusion that not more than 50 per cent of nearly 144 million children in the age-group 6-14 years were attending school that year Out of the nearly 72 million children who were out-of-school, not more than 9.5 million were recorded as main or marginal workers, 80 per cent of whom were located in rural areas. While some recent surveys indicate that the population of the working children might be two to three times of this figure, it is still true that full-time or part-time involvement in gainful employment may not be the main reasons for non-participation in basic education for the majority of the out-of-school children It is quite possible that the present dilapidated condition of the majority of rural primary and upper primary schools and their uninviting environment and poor effectiveness in terms of teaching and learning may be some of the major reasons for such large-scale non-participation. The non-availability of primary schooling facilities within the habitation in nearly 48 per cent of the 0.95 million habitations, where nearly 20 per cent of the country's population live, may be another factor for such low attendence in these habitations According to the 42nd round of the National Sample Survey, conducted in 1987-88, nearly 25 per cent of the out-of-school children stated that they did not attend the school because it was not interesting.

In the case of working children, the proportion of boys working as main workers is about two-thirds and the share of girls among the marginal workers is three-fifths. The work participation rate among children rises very steeply from the age of 10 years. It is also, therefore, evident that the difficulty in attracting children at the age of 5 or 6 years to primary schools and to retain them for four or five years should be much less formidable than at a higher age in the context of the socio-economic conditions of low income families.

One can draw several propositions from this data base. First, by further strengthening the network of primary and upper primary schools and making their environment more, attractive and the quality of teaching and learning more motivating it should be possible to improve the enrolment and retention of children in these schools Second, by diversifying the content and learning activities at the upper primary level and by making them more relevant to the life, environment and work situations of the local population, while maintaining their cognitive skills level comparable with the national standards, it should be possible to make this level of education a turning point in elementary education in rural areas. Education at this level may be more oriented towards the development of general problem-solving and self-learning skills which may prove to be more attractive and relevant to all learners, inspite of the diversification of the so-called subject-wise content Third, in order to improve the participation of girls in rural areas, there is an urgent need to evolve culturally and socially more acceptable norms for the expansion of basic education facilities in rural areas, in general, and backward areas, in particular

There is a nexus between economic and educational underdevelopment of a region, state, district or even a village. It has been observed that a district is either backward with respect to all indicators of educational development or is better off with respect to all of them A cluster of districts which are more advanced as far as the literacy-enrolment nexus is concerned, is distinguishable from other districts in terms of its superior stock of educated and skilled manpower. The intra-district disparities in an educationally advanced district have been found to level out faster The level of literacy and the proportion of workers in the non-primary sector of the economy vary together in the same direction. One of the major reasons for this coincidence seems to be the facilitating role played by infrastructural facilities like electricity, all-weather roads linking habitations and commercial centres, communication outposts, health and medical care centres, etc. Educational institutions have also become a major component of the developmental infrastructure. The lower the level of educational development of a village, the lower is the possibility of encountering the convergence of these facilities in that village

The role of the expansion of the infrastructure may also be seen differently. Like in the case of economic development, the expansion of infrastructure on its own creates a demand for new learning and productive activities The act of encouraging the local community to set up primary schools, even incomplete ones, as they existed widely in the form of indigenous schools till the beginning of the twentieth century in most parts of the country and as they exist in a depleted form till today in Kerala, may itself create a demand for basic education within the community Kerala is a successful demonstration of demand creation in basic education through encouragement of widespread community-based schools

Problems of Participation

Ownership of assets and income of an Indian are good predictors of his or her level of education Illiteracy is the highest among the landless and agricultural workers Similarly, the caste of a Hindu is also a statistically reliable predictor of the person's educational attainment This is mainly because of the social screening role education has been playing in the country in spite of a large number of egalitarian measures adopted by her since Independence The inter-relationship between basic education and other socio-economic variables gains sharper focus when such data are collected and analysed at the micro-level.

In the absence of any income data, the per capita consumption expenditure per month is taken as a measure of income. The percentage of children in the age-group of 5 to 9 years enrolled in school is strongly related with the per capita household consumption (38th round of NSS, 1983). While the enrolment rate varies with the rural and urban background and the gender of children, all the rates tend to reach a plateau approximately at the per capita consumption rate of about Rs 225 With the rise in the consumption rate, the enrolment rate of boys and girls almost coincides in urban areas at the rate of about 85 per cent. In the case of rural children, the stable rates of boys and girls differ by about 15 per cent and the average optimum rural enrolment rate is about 30 per cent lower than the corresponding urban figure. What is more interesting is that enrolment does not tend to be zero even at the lowest consumption rate of Rs 15 per capita per month In urban areas, the lowest enrolment rate is 25 per cent whereas the corresponding figure for rural girls is 15 per cent. One of the most optimistic interpretations one can arrive at out of this finding is that with appreciable improvement in the primary schooling facilities and incentives for the lower income groups, it should be possible to improve their participation Also, any measure which facilitates redistribution of assets and income among the lower income groups is bound to have a positive impact in terms of their greater participation in basic education The removal of the more or less stratified gap between the rural urban optimum enrolment rates and that between the gender-wise enrolment rates has demographic, social and cultural implications Only by initiating a higher degree of decentralisation in the management of basic education in rural areas with the greater participation of local communities would it be possible to appreciably reduce these gaps

The question of facilitating the socio-economic and educational advancement of the weaker sections has generally been reduced to constitutional and administrative measures related to the reservation of seats for such social groups in higher educational institutions and jobs. While there is constitutional provision for such reservations in the case of scheduled castes and scheduled tribes, in the recent years such provision has been extended to cover other backward castes through legislative measures Since the benefits of reservation are available only to those among the weaker sections who happen to cross the stage of elementary education, the weakest among the weaker sections who have not been able to cross this barrier are deprived of the benefit of the positive discrimination of reservation The fundamental problem of lifting the socially and economically weaker sections as a political constituency through expanding opportunities for education and employment is getting greater national attention as these sections are getting organised With the extension of the provision of reservation to cover some of the other backward castes, some of which have of late emerged as a stronger political force as a part of the farmers' lobby in the countryside, inter-caste conflicts, including those between scheduled castes and other backward castes, have also emerged as a major political issue

The problem of participation of the socially and educationally backward sections of society in basic education has different aspects The nature and dimensions of the problem are not the same everywhere Similarly, the problem of participation of children of different age or gender is also not the same The problem of participation also needs to be seen from the point of view of the gross deficiencies of primary schools and their availability at close proximity of a habitation. An analysis of the circumstances and factors responsible for poor participation and retention of children from disadvantaged groups in primary schools indicates that the problems could be categorised as (a) inadequate motivation on the part of parents, (b) low school preparedness among children, and (c) low income of those who are traditionally left out When such objective conditions are sought to be matched by an impersonal school organisation with not so highly motivated teachers, there is hardly any possibility of the situation undergoing improvement in the absence of an active participation of the community in the organisation, management and supervision of basic education

The household and community-based indigenous schools happened to be more traditionally popular among the rural communities in the past because (a) the mode of participation was informal and culturally persuasive, (b) the opportunities were physically available at door-steps, and (c) a process of child-rearing was integrated with teaching and learning. The commnity or the parents compensated the services of the community-based teachers and as such there was mutually a higher level of motivation on the part of the parents and the teachers On the other hand, the indigenous schools were not standardised or rigidly structured While their deficiencies became more glaring from the point of view of the qualifications of the teachers or the availability of teaching and learning resources when the modern primary schools came into existence, their role in creating a learning environment within the community and in preparing children for further schooling could not be denied.

One of the bold policy initiatives on the part of the educational authorities could be to revive indigenous community-based schools wherever it is feasible. Some of the programmatic measures that could facilitate such initiative would be to encourage small rural communities to collectively choose their community teacher and for the educational authorities to provide short duration intensive training to such teachers and to provide them with teaching and learning materials. The teachers may initiate their household-based preparatory level schools for local children and subsequently extend their activities up to the early primary grades. The community and the village panchayat may be encouraged by the educational authorities to provide assistance to the community teachers the way they thought appropriate.

Since for all practical purposes such community and household-based early childhood education centres are likely to play the role of feeder centres to local primary schools, they should not be treated in any way as duplicating the present schooling provision In fact, nearly 70 per cent of the rural primary schools being multigrade learning centres, the number of teachers is always less than the number required. Thus even if some children from the lower grades prefer to join the community schools, the existing school teachers would have better opportunities of doing justice to their responsibilities to the other pupils

In the above initiative, the thrust is on the creation of community-based non-governmental network of preparatory or feeder schools which none of the public educational authorities are prepared to directly own At a certain stage, the local educational authorities may assist these feeder schools with grants-in-aid This would be a much better use of the money, than compared to opening new schools, for the expansion of the existing network which has its own serious limitations in remote rural areas.

In the recent years, the government of Rajasthan and subsequently the government of Bihar in collaboration with the Central Government have taken the initiatives to induct community-based part-time teachers under a broad concept of educational worker, 'Shiksha Karmi' Under the scheme a rural educated youth is trained to organise a local learning centre and to run it under the direct guidance and supervision of the project authority Such projects are fully funded by the government and a spirit of community service is generally sought to be infused among the Shiksha Karmis Besides involving the community, the scheme demonstrates an alternate management model for expanding basic education in the remote rural areas

However, unlike in the non-formal education programme, the Shiksha Karmi implements the same curriculum as prescribed by the primary school authorities while maintaining their independent identity and new organisational culture Preliminary assessment of the scheme indicates a higher motivation on the part of the Shiksha Karmis and the project functionaries Since it is organisationally difficult to defend employment of two different categories of teachers, whose formal qualifications and salaries differ considerably, to do the same job, the government of Bihar decided to delink the project from the direct control of the state government and to run it under the umbrella of an autonomous registered society This is a step forward towards decentralised implementation of an innovative project in basic education on a large scale

It has also been observed that participation and retention of girls in rural primary schools is enchanced when women teachers are inducted more in number and they interact with the community However, in rural areas there is a genuine problem of providing them with appropriate housing facility within the villages where their schools are located In the circumstances, an innovative approach would be to identify, train and guide educated rural women in villages to take up the responsibilities of conducting community-based schools Since, in the interior, remote and small habitations, it may not be easy to get adequately educated or even literate women to take up such responsibility, identification and nurturing of such women educational workers in rural areas may become a valid concern in adult education programmes

Need for Flexibility, Diversification and Decentralisation

Relevance of the present content and process of basic education to the life and immediate environment of learners is poor As a result, the horizontal linkage between basic education and development is weak Similarly, the opportunities for further and continuing education of the existing workforce is almost negligible The main channel of renewal of either education or development at the grassroots is vertically through the higher formations of these sectors This has deprived the local communities of an important role in the process of renewal of both.

Without going into the relative merit of the direct personal gains of the learners from basic education, as compared to the societal gains, one could evolve a policy perspective regarding the relevance of education For the first generation learners, the meaning of relevance is much more crucial than in the case of others For them gaining power to articulate and to express themselves with self-confidence in a class and caste-biased milieu is as important as the learning of the basics of reading, writing and computing

Under the present structure and orientation of education, the middle or the upper primary level has become almost entirely preparatory to the general stream of secondary education While in urban areas the availability of the upper primary sector, both as independent schools or as sections attached to secondary and higher secondary schools, is widespread, such opportunities are very much restricted in rural areas in most states. On a national average less than 25 per cent of the villages have an upper primary school/section within the village In view of such limitation, when the pupils complete the primary or the upper primary stage without necessarily having any desire to pursue fulltime study in secondary schools, they have hardly any skill or practical knowledge already acquired in the school which would make them see the value of education in their day to-day life

The issue of diversification of knowledge base for basic education is becoming more cruel day by day due to the growing stress on inter-disciplinary and integrated approach to general education. Two groups of learners following two different sets of courses can arrive at a comparable level of cognitive development. This premise is lost sight of when Indian curriculum researchers dispute over the body of knowledge which is sought to be kept common for all forms of general education. Unfortunately, during the last two decades this controversy has been reduced to the acceptance of a common scheme of studies representing nearly a dozen subjects at the upper primary and secondary levels and the choice between two mutually exclusive streams of higher secondary education academic and vocational. Unless this rigidity of approach to curriculum design is replaced by a more flexible one, it may be difficult to make elementary education more responsive to the learner's needs.

The option of providing vocational or pre vocational courses at the lower secondary level, as endorsed in the 1986 policy, does not answer the right question In the present context of rapid technological change, the right question is not whether to introduce vocational courses at a particular level or to link such choices with the local market demand for trained manpower in different occupational areas. It is a much broader question of linking, thinking, reading and doing as means to solving practical problems In the context of the rapid development of cognitive science in the last two decades, the process of learning is seen more as organising and performing learning tasks, problem-solving and decision-making rather than just aquiring knowledge.

The knowledge domain of a prescribed subject provides the basis for the development of appropriate learning strategies by the learners Such cognitive skills are easier to develop when the learners themselves have the practical experience of the knowledge domain prescribed to them as a subject For example, the general problem-solving skills may be more effectively developed in the rural learners when the knowledge domain deals with the local environment or agricultural practices as the context and also the content, as it would be equally true in the case of urban children when the knowledge and experience related to the urban environment is used as the context of education Most generic cognitive skills like reasoning, analysing, synthesising have applications across the curriculum. Hence they develop more effectively adaptability of learners from one environment to another This is almost similar to the role played by the basic reading, writing and computing skills across the school curriculum

There is also no scientific basis for underestimating the importance of practical work It is now possible to appropriately design practical work not only for the development of manipulative but also cognitive skills The present global trend is to design instruction with a task environment and performance orientation of learners in view and in this sense it aims at reducing the traditional gap between theory and practice and also between education and training Conceptually, the philosophy of basic education as propounded by Gandhiji is much nearer to the present-day theory of learning

The thrust of the present policy should not be on accepting the above historical and technical background as a valid premise for removing the existing dualism between urban and rural schools, between formal and non-formal education, and between high fee charging public schools and the mainstream governmental and aided schools by internalising these experiences in restructuring the content and process of basic education In this task, the role of appropriately equipped and oriented technical support services becomes extremely important As the process of restructuring education is generally resisted internally within the school organisation, such initiatives become meaningful only when they are endorsed and articulated at the political level In this sense, the political culture in a state or in the country as a whole can play an important role in bringing about a visible change in the quality of basic education

While the universities have been playing a significant role in influencing the content and process of secondary education through the secondary teacher training colleges, the post-graduate departments of education in the universities and Boards of Secondary Education, the primary and adult education structures have to entirely depend on the state departments of education and their subordinate bodies for the training of teachers and for providing technical support on a continuing basis

In the traditional literacy and basic education planning process, the question of restructuring and reorientating the other levels of education and training are considered inconsequential However, experience shows that it is hardly possible to bring about meaningful and sustainable change in the present content, pedagogy, methods and media used in basic education in isolation from what happens in the other levels of education The sustainability of qualitative changes in the field of basic education, particularly in the actual teaching and learning practices, requires environmental, educational and research support from the higher and specialised level of education, training and research In the ultimate analysis, it is when the literacy and basic education teachers themselves experience the joy and benefit of other methods of teaching while they grow in a system of education as learners they are in a better position to promote those practices as teachers

The present structure of education and training of teachers has to undergo a process of unlearning and relearning if it has to be used for revitalising basic education and to make it supportive of national development effort The present departmental structure of training of teachers and technical support services need an imaginative new design that would bring primary schools and adult and continuing education centres closer to the sources of innovative ideas and practices. In the initial stages of building up such a flexible support system within the existing inflexible administrative set-up responsible for literacy and primary education is likely to encounter difficulties. There may be temptation to set up new institutions, to create new positions and to fill them with the existing functionaries working at lower grades Therefore, there is a strong case for initiating and accelerating a process of cadre-building in basic education with the help of innovative resource groups and institutions in a time-bound framework A part of the training of the young cadre of teachers, teacher-educators and managers recruited for such dedicated task may be in the field itself where non-traditional practices could be demonstrated. The process of setting up a new kind of training institutes and school support system must be intimately linked with a new cadre-building network

The task of sustaining innovative practices is as difficult, if not more, as introducing them. In a top-down hierarchical bureaucratic design, innovations are sought to be introduced as a turn-key job, whereas in a democratic organisational design innovation becomes a part of the organisational culture at all levels and particularly at the bottom or the classroom level One of the major responsibilities of newly designed technical support services must be directed to the building of human and organisational capacity at all levels with a view to enabling them to sustain the environment of innovation, experimentation and improvisation.

There is always an inherent danger in the process of introducing change in an organisation of reverting back to the older mould with the slackening of effort with time It is also difficult to expect that the political support in favour of change would remain consistent as and when a conflict situation arises It is precisely because of such dangers, a decentralised, open and flexible delivery system proves to be more effective in bringing about lasting and irreversible change However, in the ultimate analysis, it is the net outcome of change in terms of learning and development which would determine the merit of an implementation strategy In a flexible organisational design it is always possible to try out different alternatives simultaneously without prior judging of the merit of an option In the absence of such flexibility at present within the formal system of education there is hardly any room for justifying the present practices on the basis of their inherent merit The policy imperative to democratise the process of implementation and to make basic education more learner- and life-oriented calls for the introduction of a flexible curricular design, diversified instructional strategies and a decentralised management of institutions.

Policy Options

It is the general experience of educational policy researchers that in the absence of a major policy initiative on the part of a state or a union territory, no across-the-board countrywide policies can make dent at the grassroots. When a state takes initiative it does so within its own broad political compulsion and policy framework Similarly, in respect of regional and inter-district disparities the states tend to apply their own discretions regarding allocation of resources or devolution of administrative power. Encouragement to a meso-level policy-making in education and development in the states within a broad national framework and political culture emerges as a national imperative

The changes in the ranking of the states in terms of literacy and enrolment in primary and upper primary schools reflect the independent initiatives of a state or lack of it The rapid rise in the State Domestic Products (SDP) per capita in Punjab and Haryana has been accompanying a higher rate of growth of population with secondary level of education compared to the all-India growth rate While the rate of growth of secondary level graduates in Kerala is comparable to that of Punjab and Haryana without a corresponding higher rate of growth in SDP per capita, there is a pronounced difference in the educational development scene in these two cases Unlike in Punjab and Haryana, the rate of growth of population having completed upper primary level education in Kerala is also high. A broader base of basic education in Kerala seems to have moderated the social screening role of education more in Kerala than in Punjab and Haryana

All smaller states and union territories in the country, except Arunachal Pradesh and Dadra and Nagar Haveli, have been showing impressive growth in both primary and upper primary level enrolment This might indicate the higher effectiveness of smaller administrative units in maintaining a comparatively higher performance level of educational organisation even when the monetary and other physical inputs remain at the average level

Among the major states, Himachal Pradesh, Tamil Nadu, West Bengal, Assam and Maharashtra, besides Kerala, figure prominently with the above smaller states and union territories as the states having been able to boost up enrolment in primary and upper primary schools in the 1980s. Gujarat, Karnataka, Madhya Pradesh and 'Andhra Pradesh happen to be in the borderline of the above high educational growth states Uttar Pradesh, Rajasthan, Orissa and Bihar are lagging behind all other states both in the field of primary and upper primary enrolments. As indicated earlier, the pace of educational development in Punjab and Haryana is highly skewed Like the educationally backward states, these two states are lagging behind in the enrolment rate at the primary level, while they show a comparatively higher rate of enrolment at the upper primary level and also at the secondary level.

On a closer analysis of the public policies initiated by the states in the field of education and other social sector programmes one could see the comparative merit in state initiative in accelerating the process of development The impact of the same initiative in public policies in the educationally high growth states is now discernable.

The above situation is again similar to what happens below the level of state governments Except the recent initiatives in some states to activise the panchayati raj institutions from the district level downwards, in all other states there is a tendency to decide about the last thing to be done in the classroom at the highest level of the state government Since in most states there is hardly any strategic planning for human development, the question of dovetailing the state education plan with the general development plan does not generally arise There has been very little innovation in the process of earmarking of funds for bringing about planned change in education, despite the policy objectives of introducing micro-level planning in education

Since the plan allocations are received by the state governments, more or less, in a structured form from the centre, the state education department has no new initiatives to take other than making appointments against the plan posts and asking for tenders for the supplies and construction The next important task before them is to deal with the transfers and grievances of thousands of teachers and other functionaries In view of the very limited role the state government leadership is called upon to play in the formulation and implementation of educational plans in their own way with additional plan funds, they seem to have a general resistance to delegating some of their existing administrative and financial powers to the district or local authorities

The policy imperative of devolving the appropriate planning and financial powers to the district and local educational authorities is linked with the issue of setting priorities in education and laying down policy guidelines for their implementation at the local level as has been done in some states with good effect

Multilayer policy-making and planning is not an end in itself It creates opportunities for the educational authorities at different levels to adopt appropriate strategies for implementing programmes and evaluating their achievement within the broad national objectives and policies A decentralised mode of planning and implementing policies is also seen as an imperative from the point of view of overcoming the present serious limitations of the organisational culture of education and development Even after sharing power with the lower formations of the organisational structure, the higher authorities have the added responsibility of generating public awareness and interest about their programmes in order to enable the local communities to actively participate in the new ventures. The public interest groups thus created may act as a countervailing force at the local level which, in turn, may strengthen the hands of policy-makers

The Indian educational structures have done very little to expose themselves to new management styles and to adopt innovative management practices Like most other branches of public administration, the educational administration shares the impersonal top-down hierarchical culture of bureaucracy. The technical support services provided by the government to the educational institutions through research, training and extension activities also generally suffer from similar organisational limitations.

Very often non-governmental initiatives are opposed on the fear of privatisation of education. Here, a distinction should be made between profit-earning private and non-profit community-based institutions while deciding the case of each institution by the local authorities. Since, at present, there is no bar in the establishment of profit-oriented nursery schools in urban and even in rural areas, any deliberate initiative to create a non-profit community-based sector of pre-primary and early primary education will go a long way in curbing the iniquitous influence of the profit-oriented private sector in education. Governmental assistance to the non-profit community sector is an added safeguard against the misuse of the above initiative. The Fifth All India Educational Survey conducted by the NCERT in 1986-87 indicates that the quality of facilities and services provided by the aided private institutions are much better than those provided by the institutions directly managed by state governments and local bodies.

It has also been the general experience of management researchers that inefficiency thrives in an organisation when the same organisation is responsible for providing, supervising and monitoring programmes and it is not open to public scrutiny. Once a multiplicity is created in the delivery mechanism, a moderating influence comes into play between the implementing agencies due to growing public awareness about the comparative quality of the programmes provided by different agencies.

There is, therefore, no reasons to believe that encouragement to the local communities to come forward to share responsibility to promote education and to augment state initiative would lead to greater corruption or wastage of public funds that it is happening today. On the contrary, such partnership between the local authorities and communities is likely to act as a countervailing force against the widespread lack of institutional accountability in the existing governmental schools organisation.

One of the ways of looking at the problem would be to make a clear distinction between the field-level programme providing the support service and the different departments and agencies or its different branches within a single agency. Once a decentralised model of implementation of human development programmes through local bodies is accepted in principle, it should be possible to bring the field-level cadres appointed by different departments under the administrative control of the local bodies. For this purpose, if necessary, the administrative set-up of the local bodies may be strengthened. The local bodies or any other single agency which is responsible for coordination of human development programmes may also be responsible for entering into interagency contracts for technical and financial support from other government and non-government agencies within a broad framework evolved by the central and state governments Under such dispensation it may be organisationally much easier for the district level coordinating agencies to perform an enabling role more effectively with respect to the village-level implementing bodies which would no longer be their direct responsibility However, such arrangement may not remove some of the direct traditional hurdles faced at the district and higher levels of administration as a result of inter-departmental and inter-governmental rivalries or lack of mutual trust, cooperation and understanding. Appropriate legislations in the states may be necessary to remove such hurdles.

Planning for human resources and organisation development may go hand in hand for the mobilisation of resources for school buildings, additional teacher positions, library and other physical facilities for primary schools and continuing adult education and training centres Since additional funds for such major initiatives are required urgently and most of it as one-time expenditure, it may not be feasible to mobilise such large sum of money through any inter- or intra-sectoral budgetary readjustments, although there should be some room for such initiative for increasing the recurring maintenance funds for basic education in the subsequent plan periods.

One of the major initiatives to mobilise additional resources for basic education would be to adopt a decentralised model for its implementation and to provide legal instruments to the local bodies, if some of them still lack such provision, to collect local education cess either from the sale of agricultural surpluses or on the basis of land ownership or similar other channels. Some of the studies related to the role of local bodies in mobilising resources for education indicate that the state governments are often reluctant to encourage the local bodies to take such initiative or to enable them to raise the rate of taxes collected by them. This is inspite of the fact that there is a growing feeling among most economists and planners that there should be some room for exploiting the recent increase in the agricultural income of the rich farmers in rural areas for the benefit of the rural population, in general, and the underprivileged, in particular

As it has been pointed out earlier, a major reason for the poor return from the existing infrastructure is the inadequacy of the investment In the absence of any substantial investment in the vital area of quality of education, the utilisation of even the existing physical facilities of primary schools in some areas has remained much less than the optimum Non-availability of adequately qualified teachers and poor management and supervision of rural primary schools have been the major reasons for higher rate of dropout and stagnation in single and two-teacher schools compared to others. It is, therefore, reasonable to believe that once the barrier to improved participation of the community in the basic education endeavour is crossed through a massive mobilisation of people and resources, it may not be difficult for the country to come out of the burden of illiteracy and deprivation in a short period.

NOTE

Besides the published Census, National Sample Survey, Annual Economic Survey and All India Educational Survey data, the author has extensively drawn upon the research study titled, "Basic Education and National Development—The Indian Scene" by A K Jalaluddin, Y P Aggarwal and others which is under publication by UNICEF, in the preparation of the present paper

Universalisation of Elementary Education: A Programme for Action

M.P. PARAMESWARAN

INDIA had a glorious past. Once upon a time cities like Mohenjo-Daro and Harappa and ports like Lothal flourished here Famous physicians and surgeons like Charaka, Sushruta and Vagbhata lived in this country. Mathematicians and astronomers like Aryabhata, Brahma Gupta, Varahamihira and Bhaskara taught here From the four corners of the world scholars came to us, to Nalanda and Taxila, in search of knowledge

Gone are those days. Today we are the most illiterate nation in the world, the most sick nation in the world, the most hungry nation in the world Even the very freedom for which our forefathers fought is in danger. This is the sad situation today

We wrote in our Constitution (Article 45) that "The state shall endeavour to provide within a period of ten years from the commencement of the constitution for free and compulsory education for all children until they complete the age of 14 years". We have written many other goody goody things too in the constitution None of them has been realised. Majority of the adult illiterates today are persons born after independence. Had they been given schooling up to 14 years of age, nay even up to 9 years of age, they would not have been illiterate today Unfortunately even today, 40 years after the adoption of the constitution, not even 25 per cent of the people are getting education up to 14 years of age In the case of girls this is less than 15 per cent A substantial number of children are not even enrolled in schools Among those who get enrolled 30 per cent drop during the first year itself Only less than 50 per cent complete five-year schooling[1]

Sixty years ago Mahatma Gandhi said "We have the education of this future state I say without fear of my figures being challenged successfully, that today India is more illiterate than it was fifty or hundred years ago, and so is Burma, because the British administrators, when they came to India, instead of taking hold of things as they were, began to root them out. They scratched the soil and began to look at the root, and left the root like that, and the beautiful tree perished. The village schools were not good enough for the British administrator, so he came out with this programme. Every school must have so much paraphernalia, building and so forth. Well, there were no such schools at all. There are statistics left by a British administrator which show that, in places where they have carried out the survey, ancient schools have gone by the board, because there was no recognition for these schools, and the schools established after the European pattern were too expensive for the people; and therefore they could not possibly overtake the thing. I defy anybody to fulfill a programme of compulsory primary education of these masses inside of century. This very poor country of mine is ill able to sustain such an expensive method of education. Our state would revive the old village school master and dot every village with a school both for boys and girls."

Much of this is true even today. We have more illiterates than 1931. In fact more than the world population in 1931. Some of us may argue that Gandhiji's challenge has been met, in as much as that we have been able to provide 94 per cent of the population with "European pattern" schools – after all that is the pattern of our "modern education" - within one kilometer walking distance[2]. But it is well known that what we give in these schools is only an apology to modern education. The "haves" have their public schools, the Doons, the Lovedales, the Springdales, the Trivenis, and so on. The urban middle class have their model schools and recognised schools. The rural areas have got a few Navodayas. The "havenots" have only their one-teacher ramshackle sheds where practically no education takes place. The "Operation Black Board" designed to improve the plight of these schools has not succeeded. One may be tempted to agree with Gandhiji that India is too poor "to sustain such an expensive method of education". Definitely one cannot convert each and every school in India into Navodayas, Doons, Springdales, and Trivenis. But modern education does not necessarily mean good education and the education imparted through these schools need not necessarily be the best. Of course, this leads to the question of what is "good education", to the question whether the present education is relevant to us. However it can be said that good and relevant education need not necessarily be costly. Further, the criterion of "1 km walking distance" may not be acceptable and even practical in a large number of cases. As the proof of the pudding lies in the eating, one can say that this expansion in the "number" of schools has not solved the problem. At this point we do not go into the reasons and causes of this failure. They have been dealt in sufficient detail in the NPE Review Committee Report. Only one point we would like to emphasize here. it is not only a question of finance alone.

In a nut shell one can say that a good percentage of our children do not get any "formal education" and that what others do get as education is of questionable value. There is allround criticism: about curriculum, about method of teaching, about evaluation, in short about everything. We can perceive education as a conscious effort or process to enable the new born child to develop both as an individual and as a member of a collective and to impart to it skills and capabilities so that it carries out the productive activities entrusted to it in due course by the society, as well as abilities to appreciate the cultural heritage of the society to which it belongs—of humanity in general. If this general understanding is adopted, by and large our education is counter-productive Bulk of the children born after independence were destined for vocations like agriculture, fishing, various cottage industries, etc. They were never trained for any of them. In fact they could never become good farmers, good fishermen or good handicraftsmen. Education in fact played a negative role The so-called modern education was geared to the production of "Baboos" Attempts to professionalise it through emphasis in science did not succeed in achieving the desired goals A white-collar management job—preferably services like IAS, IFS, etc —became the supreme goal of both parents and their wards. This is generally referred to as the "Macaulay Syndrome". Very little study has been done in the deleterious effect of this on general education. We criticize that right from primary, nay even from preprimary stage, it is one straight ladder to university education and one geared to the immediate socio-economic activities of the society Over the years a sort of skepticism, a feeling of uselessness of our education, has been developing within the society. Failure in the universalisation of elementary education may have something to do with this skepticism.

The Possibility

The objective of this paper is not to lament. We have been doing that sufficiently long We want to present a plan of action which may be termed as a 'dream' by skeptics. The optimism and faith is based in the experience in the literacy campaign. The society is still not lifeless. There is a large amount of hidden goodness. The objective simply stated is this: to realise what has been ensured in the Constitution—within coming ten years, to ensure that every child gets free and compulsory education up to 14 years of age—to ensure that this education is meaningful, to ensure that it does not alienate the child from productive work or from the society It will be a mutlipronged plan of action with several components. The refrain is societal involvement This requires fulfillment of certain conditions

1. Creation of optimism and faith that this is possible.
2. Making education highly desirable.
3. Making universal education possible.

A well-thought-out action plan has to be conceived The National Sample Survey Report, 42nd Round (Tables 1 and 9) gives the important reasons for nonenrolement and dropout About 30 per cent of the non-enrollers are simply not interested in education and 10 per cent do not have facilities around About 45 per cent reported economic reasons or household work Among the dropouts nearly 50 per cent do so due to lack of interest or due to failure. Even among those who report economic reasons for non-enrolment a good many may be tempted to go to school if there is strong enough motivation One can say that the three important reasons for non-enrolment and dropout are:

1. Lack of motivation.
2. Lack of facilities.
3. Economic compulsions

There had been a number of interesting experiments for creating motivation. One of the most recent one is that done by Subba Rao, Collector of Chittor District, Andhra Pradesh and his colleague Shri Subramanian (Private Communication). They termed it as "Operation Back to School" To begin with, they identified about 30000 non-enrollers/dropouts belonging to SC/ST in the district A good number of them reported non-economic reasons, mostly irrelevance or poor teaching The experiment was intended to see whether they could be motivated to go back to the school through better pedagogy. From among the thirteen thousand and odd primary teachers in the district they selected 160, most committed ones; for an intensive 10-day training, developed by David Horseborough, in a special centre run by Dr Narasimhan and Usha Narasimhan. Later, these 160 teachers imparted an intensive two-month residential coaching to about 50000 selected non- enrollers/dropouts. This was done in Harijan hostels during summer vacation, 1991. Both the children and the teachers stayed at the hostel. Later, the children wrote entrance tests for Classes II to V and about 4200 of them got readmitted. In order to make the teaching/learning process interesting in these regular schools, now all the teachers in the district will be given intensive training in the new pedagogy. This experiment is still incomplete. But the results obtained so far indicate promises far beyond reinduction of dropped-out children. The entire education system could be rejuvenated once the teacher gets excited. Some may dismiss this as wishful thinking

A totally different experiment with totally different objectives is going on in Rajasthan We are referring to the Siksha Karmi project. Its objectives were[3]:

1. Universalization of education in remote, socio-economically backward villages in those blocks of Rajasthan State where the existing primary education has proved particularly in-effective.
2. A qualitative improvement of primary education in such villages by adapting the form and content of education to local needs and conditions.
3. Achievement of a level of learning equivalent to the norm for Class V to be achieved by all children in the project villages with primary attention given to girls.

The target was to open 6300 centres, of which 4200 as night centres, and to enroll about three lakh children In 1990, S Ananthalakshmy, assisted by Deep Jain and Sharadha Shrivastava[4] conducted an assessment of children's achievement under the Shiksha Karmi Project (SKP) As part of the study they compared the achievement levels of 437 children under the SKP and 550 children under the regular primary school (PS) system. The Shiksha Karmi, when compared to regular school teachers, had much less educational qualifications and even lesser formal training. As far as physical facilities are concerned, in this rigorous comparison, the regular schools had much better facilities. But to their surprise they found that the achievement levels of the SKP children in most of the cases were far higher than those of regular primary school children. Why were the children in these remote villages and tribal areas better informed than those attending the regular school system? They give the following explanation.

1. First of all, the school was within reach. Its situation in the village where families lived was the initial scoring point.
2. Secondly, Shiksha Karmi or education worker, is a resident of the same village, and, therefore, accessible to the people and accountable to them.
3. Thirdly, the training programmes were more imaginatively planned than that of the standard B.Ed. programme. One time pre-training, with no renewal or refreshing after that, is the system to which we are accustomed. The continuous inservice model adopted here is seen to have a greater prognosis for success, as the Mobile Creches training model has already demonstrated.
4. As observed on the prepilot and pilot visits, and substantiated in the field notes, the level of enthusiasm was high on the part of the SKP children. They seemed to feel the new hope that their schooling symbolized.
5. It was possible for the workers, the trainers and the children to share the identity of the new scheme as the SKP.
6. Sixthly, the Shiksha Karmis, both male and female, had a new role that added to their prestige in their own neighbourhood. Self-esteem of the teacher is one of the major predictors of achievement in any school.
7. The part played by the voluntary organization in that region in providing a support system was significant. To feel linked up with the larger world, to be sure that help would be available when needed and to have the opportunity to interact with caring and concerned adults, these made the SKP succeed against all odds.

Accountability to the people, imaginative training, self esteem of the teacher—these are the three crucial points. This has a wider significance than a mere comparison of the SKP with the PS system in Rajasthan. What has been brought out vividly is the inherent malady afflicting Indian education. It has become a "degenerate establishment", with no internal vigour.

A similar experiment done in Bangladesh too produced similar results. The "barefoot schools" established by a voluntary organization with much lesser cost than regular schools established by the Government became more popular with the people. They began to withdraw children from regular schools and put them in these "barefoot schools", which have lesser 'qualified" teachers and poorer physical facilities, but provided an infinitely better learning environment.

The Kerala Shastra Sahitya Parishad has been doing a series of experiments to make the teaching-learning process enjoyable both to the learners and the teacher

An integrated approach to science teaching was developed The terms like "activity based" "child centred" and "life-oriented" were supposed to be useful only for B Ed examination and not practical in real teaching because then one will not be able to 'finish portions' The central point of the experiment was to see whether it is possible to make, even with existing textbooks, education activity based, child-centered and life oriented and still finish "portions" in time In the first stage of the experiment three teachers and 40 students were involved directly Another 20 teachers participated as observers The entire set of lessons in Class VII general science which is normally covered during the first term, in 56 periods, was taught to Class VI pass students within a period of 25 hours and ten days The entire textbook material was presented in life-oriented manner and taught through activities Later, these children were subjected to the same test as was usually given at the end of the first term in Class VII The general performance level of the class was much higher The number of failures came down significantly Later, the experiment was repeated in about 30 schools with about 1300 children There was uniform improvement in performance levels as was measured by the examination results. A questionnaire was sent to the concerned teachers to assess the replicability and achievements of this method They wrote

"In activities like collection, observation classification etc , the pupils who are normally backward seem to be more interested and benefited "

"The pupils grasp concepts better. They could score higher marks in the tests. But their performance is better in oral testing and activities rather than in written tests "

"Now my pupils feel that the most interesting subject is science They are more interested in their studies I myself have a more pleasant experience Why not adopt this system in other subjects too?"

"My pupils have become more inquisitive They ask more about their doubts Only thing is that I should learn more to clear their doubts "

" They have developed a keen sense of observation They often ask a number of questions about the things they see around "

'I have been teaching science in both the ways simultaneously just for a comparison, though it is very difficult to go back to traditional manner I am sure this method is much more beneficial and effective "

"This method of life-oriented teaching is more effective This system actually reduces the effort on the part of the teachers "

"In some topics we get better participation from the pupils, but in others it is not satisfactory We shall have to find out more activities in some topics "

Even more elaborate programmes are being carried out by the Eklavya group in Madhya Pradesh The educational experiments of the Vikram A Sarabhai Community Science Centre and the Centre for Environmental Education in

Ahmedabad too are interesting All these experiments can be collectively termed as "Joy of Learning" They show us a way to make the teaching-learning process enjoyable and education desirable The single foundation on which the entire approach rests is the teacher. It is a new kind of teacher It is a transformed teacher The starting point for Universal Elementary Education (UEE) has to be the teacher It may not be easy to motivate the teacher who too shares the general cynicism and pessimism pervading the society

The total literacy campaigns that have been gathering momentum for the past two years give us the clue as how to motivate people, including teachers. In fact, the Chittoor experiment was precisely a product of this enthusiasm A total literacy campaign was initiated in the district Tens of thousands of volunteers were teaching hundreds of thousands of adult illiterates. There was a sense of excitement. But more sober considerations revealed that if we are not able to prevent recurrence of illiteracy this is a futile exercise. The illiterate children should be given Non-formal Education. In the long run Universal Elementary Education is the only sure guarantee against recurrence. But the literacy campaigns proved one thing: people can become excited, societal will can be awakened and the learning process can become a people's festival.

The Programme

Based on these considerations we want to place before you a programme of action This is not a micro-level experiment We do not have any more time for that. It has to be a macro-level one, a mass movement and could go hand in hand with total literacy campaigns This involves several activities: environment generation, teacher retraining, curriculum adaptation, generation of additional human and material resources and meticulous planning Literate parents are generally more motivated than illiterate parents to send their children to schools. The literacy campaigns have made them more vocal Till now they were not very much concerned about their children's education. But today they are awakened They have begun to demand education for their children This means a demand for more schools, a demand for more teachers, a demand for more amenities, a demand that teachers should teach, and so on. This can be effectively developed into a societal movement for Universal Elementary Education

Total literacy campaigns are being taken up both at district level—illiterate population varying from one lakh to twenty lakhs (Midnapore)—and block level. Even in cases where TLC is taking place at district level the UEE programme requires smaller units The National Institute of Educational Planning and Administration (NIEPA) had brought out detailed guidelines for planning at micro-level for UEE[6]. But his was before the advent of TLC. The Ministry of Human Resource Development (MHRD) has brought out, in 1991, revised guidelines for operationalizing micro-level planning[7]. This takes into account the TLC experience. It has taken, and very correctly so, the block as the appropriate unit for planning Even in TLC districts the district UEE plan has to be split into block plans. Sahayoginis and Sakhis, Women's Development Project Prachetas, Shiksha Karmis, ICDS Anganwadis, etc. It lists out a few possible approaches like the Mahila Samo Model, the Social Animator Model, the Voluntary Agency Model, the ICDS Model, the Panchayati Raj Model and the School Complex Model. We suggest the Panchayati Raj Model with the VEC or something similar should become the mainstream. All others should join it as tributaries. It is the most democratic model Mahila Samoohs, Animators, Anganwadies, voluntary agencies and school complexes should become the elements of a comprehensive Panchayati Raj approach Even in situations where Panchayati Raj is either non-existent or highly hostile to the havenots, the aim of other models of intervention should be to develop a situation where Panchayati Raj becomes both dynamic and democratic The key to success, as evinced from the Shiksha Karmi Project and others, is accountability of the teacher to the local community and also proper training A formal education system with hierarchical accountability shields the teacher from the local community This situation has to change. The formal education system, at least the elementary education section, should become answerable to the Panchayati Raj or VEC The teachers will have to reside in the village They will have to abide by the school timings as decided by the VEC and not by bus timings Those who find this unacceptable will have to look for other vocations

In a paper titled "Tomorrow Will Be Too Late" we had put forward a pilot programme of involving students and youth for national regeneration. This programme had four components· education, health, development and culture. The UEE has got a better chance of success when placed in the larger perspective of development The objectives are summarized as below:

1 Effective UEE in terms of enrolment, retention and achievement.
2 Drastically reduced illiteracy especially among women, scheduled castes and scheduled tribes
3 Reduced IMR and reduced morbidity from poverty-related, especially water-related, diseases.
4 Development of a positive world outlook within the society with a new sense of patriotism
5 Substantial increase in productivity and production and a more just distribution

This pilot programme is getting ready to be tried out in ten mandals in Andhra Pradesh as part of the Total Literacy Campaign

At this stage the following questions need to be raised Are we not really doing a disservice to the nation by extending the present type of education to more people? Are we not going to alienate more children from the productive activities that exist in the society today? Will we not create more claimants for "white collar, government jobs"? Will it not accentuate the Mandal or anti-Mandal type of agitations? The answer to all these questions might possibly be 'yes' This is not to argue against universalization of education but to argue for radicalizing it, to make it meaningful for the nation The uni(versity) directional education vector has to become multi-directional This requires a number of drastic measures It demands a restructuring of the curriculum of elementary education to make it life-oriented We will have to look into the contents and levels more critically The report of the committee set up by the MHRD to define minimum levels of learning[9] at primary stage will have to be looked into again with this objective. It is only a segment of the university-directed sector We have to detach ourselves, even subconsciously, from the pull towards higher education. The objective of the education we impart to the primary children is not intended to prepare them for a university career. Its objective is, on other hand, to make them genuine citizens of the society which they belong to The teachers should be trained to integrate education in all its aspects with local life situations It would demand a study of local flora and fauna, local natural resource, land use, local history and culture, etc. This is a challenge to the teachers, but an exciting one, a rewarding one As we move upwards to the secondary and higher secondary levels, students will have to be trained to 'compete' at the national and international levels The curriculum content will have to gradually shift from local requirements Bulk of this can be achieved through additional credit courses at the higher secondary level There will have to be variety of vocational courses after primary (5 years), secondary and higher secondary education

The higher secondary education itself has to be vocational in character, preparing the students for immediate employment as clerks, typists, secretaries, data entry operators, etc A set-up of additional academic courses can be offered to those desirous of higher education The general BA, BSc, MA, MSc courses have become obsolete and irrelevant since long ago. Even more incongruous is the concept of all-knowing administrator embodied in IAS, an unfortunate legacy of the colonial years We require managers and development administrators, but a historian IAS is not the best manager for a steel factory The university education is to be profession-oriented Three major classes of professions can be identified (a) Management or Development Administration, (b) Research and Development, and (c) Services and Production The last category consisting of teachers, doctors, lawyers, engineers, etc constitutes the bulk content of higher education The "Management" and "R & D" streams are to be fractionated from this stream through competitive examinations. Horizontal and vertical mobility should be facilitated through appropriate bridge courses It is needless to emphasize that all professional courses are to be designed to suit the actual requirements of the economy

Today our best universities and professional institutions are not really training citizens of India but "export humanware", so we can have a conscious programme for "Brain Export". There is no harm in it But then export commodities should bring in foreign exchange, not as NRI, but as tea, iron ore or prawns. They are no different!

At any rate, a "brain export" programme should not dictate the curriculum of our primary education! Our middle class and upper middle class parents may like to bring up their children as export commodities, or as collectors, doctors or engineers. They may advocate a system of education wherein the children are trained from cradle onwards towards this goal. This cannot be allowed. Some of these goals, in as much as they are necessary for Indian economy, can be comfortably incorporated at the secondary level

The Course of Action

1 Form a district/block level core group if it has not been formed already for literacy programme
2 Form people's committees for total education at district/block/ panchayat/ village levels and organise discussions
3 Prepare detailed household and institutional survey forms and train volunteers at panchayat/block levels to carry out survey If illiteracy census was not done earlier, organise a one-day house-to-house census too Then a few more questions can elicit the required information about 5-14 age group
4 Consolidate and analyse survey data with meticulous care. The two survey results will bring to light the major problems
5 Identify
    a. The children who are not going to school only because the school is far away If this number is sufficiently large, one can think of opening a new school Otherwise they should be given NFE till they are sufficiently grown up to go to more distant schools.
    b Cases where the existing schools are not running properly because of lack of rooms, roofs, benches, boards, etc.
    c Teacher absenteeism and reasons thereof, in detail
    d Number of children—age-wise—who would like to go to school but cannot go because of unsuitable timings
    e Those children whose parents are simply stubborn in not sending children to school
    f Cases and nature of social discrimination
6 Organise a high pressure, high profile propaganda addressed to parents, to citizens and to teachers, especially to their organisations, placing before them the relevant statistics and the prospect of universal literacy and universal education
7 Form district/block level 'Pedagogy Theatre' groups Before this a small workshop may be organised to develop the concept of pedagogic theatre which encompasses students, teachers and parents

8. Organise pedagogic theatre jathas visiting each and every school as well as the public.
9. Organise Children's Science Festival at block level
10. Organise intensive teacher formation and transformation workshops

    The thrust of the entire programme should be the following

    a. Children of the age-group 5 8 should go to school Prevail upon the parents. Children of the age group 5-7 can be directly admitted in Class I, children of the age group 7 9 should be given two to three months NFE and then put them into Class III or IV. They should pass Class IV or V as the case may be for primary
    b. Children of the age-group 9-14 should get about 1200 hours of schooling in 400 to 500 days during a period of two years. This need not necessarily be non formal. The same textbooks in the formal system can be used, or, if necessary, some abridged version of the same The duration can be definitely reduced from the conventional mode, by cutting of unnecessary details Further, the higher age level of the learners too will help quicken the pace The suggestion is as follows The "regular school" can be held in two shifts, if necessary, between 8 A M to 10 P M. One shift for the regular students and the other for working children The timings for the latter are to be extremely flexible. The number of students in each class can vary from 15 to 40 There could be children of different levels in one class As far as possible in one year itself they should be brought to Class V level so that in the next year or year and a half, they can be taken up to Class VII or VIII. Those children who are now 12 or 13 years old, those who had some previous schooling, say Standard I or II or even more, can be brought up to Class VIII in two years This, of course, requires development of an accelerated course The achievement levels in literacy, arithmetic, general science and social science are to be prescribed It may be borne in mind that these are not the children who are preparing themselves for university education or for an academic career They are trained to become more effective in their day-to-day life Hence the curriculum will be different The key word is "flexibility".

The crucial element for the progress and success of this education revolution is the availability of an adequate number of teachers. Appointing more teachers or giving extra allowances to the existing teachers will not be possible, partly due to shortage of resources, and partly because this may cause the programme to degenerate as was the experience earlier with both AE and NFE The additional teaching strength has to be obtained in the following manner·

a. All existing teachers putting in more "patriotic labour" so that they may be available in the schools for a total of nine hours a day (as in the case of factory workers). They may not be teaching all the nine hours. The teaching methodology may be so designed that they would not be required to take home large volumes of 'correction work'. However, they will have to prepare their teaching notes, etc. for each day a couple of hours every day.

b. Initiate a massive programme to retain teachers, to help them to really enjoy teaching. This can be done. There is ample experience in the field—Shiksha Karmi, Operation Back to School, Joy of Learning, Ekalavya, etc. It will be possible to select a set of activities from an elaborate menu prepared from the experience of the aforesaid groups so that teacher retraining programmes at block and district levels can be initiated.

c. A large number of secondary and college students too can be mobilized for this purpose. This technique will form part of their learning curriculum and will help them to understand what they have "learned" earlier.

d. The society has got other educated persons. There is generally a class/caste divide between them and the unlucky children who require NFE. The high profile, high pressure propaganda appealing to their patriotism and sense of justice can, to some extent, help to dissolve this divide. They too can function as FE/NFE teachers.

As a thumb rule one can say that the total availability of the number of "teacher days" in a given locality has to be doubled or trebled as the case may be. The actual number can be obtained by the process of batching all the potential leaners, on the one side, and all the potential teachers, on the other, and matching them keeping in mind that the physical distance between them has to be reduced to a minimum. The cultural distance between them is expected to come down as the duration of contact increases.

There will be a large number of cases where this matching becomes difficult because the prospective teachers are available nowhere in the vicinity but only far away. The solution lies in (a) looking harder for potential teachers, searching them at unexpected quarters and places which one would have written off without attempting, (b) transporting them from nearby areas on a daily basis, or (c) raising enough community resources to obtain the services of a few educated, untrained youth on a full-time basis, at a nominal honorarium and at the society's hospitality.

The going will not be easy, but it will be exciting. The central motive force is a sense of "patriotism" both at the local and national levels.

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Universalisation of Elementary Education

P N. DAVE

WRITING on the theme of Universalisation of Elementary Education (UEE) in India at this juncture is indeed quite different from what one would have written before the World Declaration on Education For All (WDEFA) released as a consequence of the deliberations held by "the delegates from 155 governments, including policy-makers and specialists in education and other major sectors, together with officials and specialists representing some 20 inter-governmental bodies and 150 non-governmental organisations. The document bemoans in its preamble that although more than 40 years ago, the nations of the world, speaking through the Universal Declaration of Human Rights, asserted that 'everyone has a right to education', some stark realities persist. Some of them are listed below:

- "More than 100 million children, including at least 60 million girls, have no access to primary schooling,
- More than 960 million adults, two-thirds of whom are women, are illiterate, and functional literacy is a significant problem in all countries, industrialised and developing, and
- More than 100 million children and countless adults fail to complete basic education programmes; millions more satisfy the attendance requirements but do not acquire essential knowledge and skills "

One needs to view the constitutional obligation in India, i.e. provision of free and compulsory education for all children in the age-group 6-14, in the global perspective that has been emerging since the above declaration

Status and Achievement of UEE in India

There is no gainsaying in stating the fact that a large majority of these millions of illiterate and non-enrolled and/or out-of-school children are residing in South Asia That a sizable chunk of this population is in India is not only the most embarassing but also the most disturbing aspect of the efforts we have made so far towards achieving the cherished goal of universalisation of elementary education That is not all, the unfortunate part of the story is that the country is nowhere near achieving even the goal of universalisation of primary education The earlier this stark reality is recognised by one and all in India, the better it will be for all of us—the macro level high profile administrator and the low profile micro level field worker. Resolutions or promulgations of ordinances as well as public cliches are just not going to make an iota of change in the existing situation, i.e. being almost at the bottom of the list of countries in providing basic education for all.

The Past

Lest these comments be construed as negative or cynical or biased, it may be clarified that India has done rather remarkably well, inspite of the oppressive and erratic economic and socio-political system, coupled with severe resource constraints, and our children, who stay in the primary system of education, are in no way inferior in achievement to any other in the world.

Before attempting at the analysis of the present situation and a future projection, a peep in the past would be helpful.

There is no denying the fact that, so far as school education was concerned, India was in a dire strait during the British Raj. This is no place to examine the pros and cons of Macaulay's educational system, except stating that not only the system was irrelevant to the needs and aspirations of our people but was also primarily geared to exploit human resources for the only goal of sustaining and prolonging the British rule in India. Since they were the rulers, one cannot refute their right to impose their kind of educational system on the subjugated

All available information strongly indicates that at the time of attainment of independence in 1947, the health and education scenario in the country was, to say the least, dismal, if not altogether hopeless. Young children and mothers were an utterly neglected lot The mortality rate was very high and morbidity rampant in the young population due to lack of proper health care and adequate nutrition. The level of achievement in elementary education was extremely low in almost all respects Thousands of villages and rural habitations, particularly those in hilly and mountainous regions, were without schools. Only one child out of three in the age-group 6-11 and one child out of eleven in the age-group 11-14 were enrolled in schools. Educational inequalities were large, especially between one region and another, between urban and rural areas, between boys and girls and between the advanced and intermediate castes, on the one hand, and the Scheduled Castes (SC) and Scheduled Tribes (ST) and Other Backward Classes (OBC), on the other. The quality of elementary education was poor and the rates of drop-out and stagnation were extremely high.

India undertook the gigantic task of national construction aimed at bringing about socio-economic transformation and at creating a new social order based on the principles of democracy, social justice and secularism. That without providing education to masses, it was well nigh impossible to achieve economic development and to establish a just and egalitarian society, came to be accepted as an indisputable fact by those who framed the Indian Constitution. Hence the total commitment to making the provision of free and compulsory education for all children in the age-group 6-14. This cherished goal should have been attained by the year 1960. However, the target date had to be first revised to 1970, then to 1976 and later to 1988. The new target date, according to the resolution in the National Policy on Education (NPE) 1986, was 1990, which seems to have been now deferred to 1995, may be to 2000. One would wish that as a nation we should have been more discreet in fixing the targets which were realistic and within our reach.

For the sake of brevity, a quick review, by no means deep or exaustive, of three major components of universal elementary education is presented here, viz. (i) Provision of Educational Facilities, (ii) Enrolment and Retention of Children (for the full cycle of five/eight years), and (iii) Quality of Elementary Education.

Provision of Educational Facilities

Substantial progress has been achieved in the provision of school facilities since 1950. As is evident in Table 1, the overall percentage increase in elementary

TABLE 1

Growth of Primary and Middle Schools in India (1950-51 to 1986-87)

Year	Primary School	% increase	Middle School	% increase	Total	% increase
1950-51	209,671	Base	13,596	Base	223,267	Base
1955-56	278,135		21,730		299,865	
1960-61	330,399		49,663		380,062	
1965-66	361,064		75,798		436,862	
1970-71	408,378		90,621		498,999	
1975-76	454,270		106,571		560,841	
1978	474,637		112,404		587,040	
1980-81	485,538		116,447		601,985	
1981-82	495,007		119,560		614,567	
1986	631,308	201	187,002	1280	818,910	267

Source (i) 'A Handbook of Educational and Allied Statistics', Ministry of Education and Culture, Government of India, 1983 (for 1950-1951 to 1980-81).

(ii) 'Selected Educational Statistics 1981-1982', Ministry of Education and Culture, Government of India, 1983 (for 1981-1982)

(iii) 'Fourth All India Educational Survey', NCERT, New Delhi, 1980

(iv) 'Fifth All India Educational Survey', NCERT, New Delhi, 1990 schools was (reference date 30 September, 1986, NCERT, 1990) 267, the increases in primary and upper primary schools being 201 and 1280, respectively. Needless to point out, while the growth in primary schools should be considered substantial, that in the upper primary sector, phenomenal.

Rural Population Served

Usually, the rural area is considered educationally disadvantaged. The Fifth Survey indicates that the percentage of population served by primary schools/sections either within the habitation or in the neighbouring habitations up to a distance of one km was 94.6 in 1986. Similarly, the percentage of rural population served by upper primary schools/sections either within the habitation or in the neighbouring habitations up to a distance of three kms was 85.39. Coverage of population by schooling facilities has, therefore, become more or less universal so far as the primary stage is concerned. One cannot say that the facility of schooling is inadequate at the upper primary stage.

Enrolment and Retention of Children

Universal Enrolment: Viewed with reference to the galloping population, the progress achieved in increasing enrolment at the elementary stage so far has been remarkable. As can be seen in Tables 2 and 3, Gross Enrolment Ratios (GERs) have been increasing steadily since 1950-51 in both the primary and upper primary sectors—42.6 to 91.7 per cent and 12.9 to 51.2 per cent, respectively, which is by no means a mean achievement. This suggests that the country's educational system has not only absorbed the increase in the elementary school-age population from year to year but also has been able to raise it each year in such a proportion that in 1986, the GER at the primary stage rose to 91.7 per cent. The corresponding Age Specific Enrolment Ratio (ASER) was 75.9 per cent (NCERT, 1990, p.21). Further, the Fifth Survey has recorded that the percentage increases with respect to rural areas and girls in 1986 over 1978 were as indicated below:

Class I-V	*Total*	*Girls*
% Increase	25.23	33.55
Rural	26.71	38.24
Class VI-VIII	51.86	64.03
Rural	61.76	84.94
SC Enrolment		
Class I-V	45.49	
Class VI-VIII	99.31	

ST Enrolment	
Class I-V	56.30
Class VI-VIII	129.33

TABLE 2

Enrolment in Classes I-V (1950-1951 to 1986-87)

Year	Enrolment (in million)			Percentage of Children Enrolled in Classes I-V to Total Population in the Age-group 6-11		
	Boys	Girls	Total	Boys	Girls	Total
1950-51	13.770	5.385	19.155	60.8	24.9	42.6
1955-56	17.528	7.639	25.167	72.0	32.8	52.8
1960-61	23.593	11.401	34.994	82.6	41.4	62.4
1965-66	31.160	17.675	48.835	96.3	56.5	76.7
1970-71	35.739	21.306	57.045	92.6	59.1	76.4
1975-76	40.649	25.011	65.660	95.7	62.0	79.3
1978	42.351	26.251	68.602	97.0	64.2	81.7
1980-81	44.576	28.112	72.688	99.0	66.2	83.1
1981-82	44.976	28.587	73.563	99.4	66.9	83.7
1986	51.006	35.050	85.913	106.4	79.9	91.7

Source. (i) 'A Handbook of Educational and Allied Statistics', Ministry of Education and Culture, Government of India, 1983 (for 1950-51, 1960-61, 1970-71 and 1975-76)

(ii) 'Second All India Educational Survey', NCERT, New Delhi, 1975 (for 1965-66)

(iii) 'Education in the Fifth Five Year Plan (1974-79)', Ministry of Education and Culture, Government of India, 1972 (for 1955-56)

(iv) 'Selected Educational Statistics' (1980-81 and 1981-82), Ministry of Education and Culture, Government of India, 1983, (for 1980-81 and 1981-82).

(v) 'Fourth All India Educational Survey', NCERT, New Delhi, 1980.

(vi) 'Fifth All India Educational Survey', NCERT, New Delhi, 1990

TABLE 3

Enrolment in Classes VI-VIII (1950-51 to 1986-87)

Year	Enrolment (in million)			Percentage of Children Enrolled in Classes VI-VIII to Total Population in the Age-group 11-14		
	Boys	Girls	Total	Boys	Girls	Total
1950-51	2.586	0.534	3.120	20.8	4.3	12.9
1955-56	3.426	0.867	4.293	25.4	6.9	16.5
1960-61	5.074	1.630	6.704	32.2	11.3	22.5
1965-66	7.523	2.721	10.244	44.2	17.0	30.9

1970-71	9 426	3 889	13 315	46 5	20 8	[illegible]
1975-76	10 990	5 034	16 024	47 0	23 3	35 6
1978	12 086	5 872	17 958	53 4	29 3	37 9
1980-81	13 278	6 568	19 846	52 1	27 2	40 0
1981-82	13 971	7 084	21 055	54 2	29 1	41 9
1986	17 641	9 632	27 273			51 17

Source (i) 'A Handbook of Educational and Allied Statistics', Ministry of Education and Culture, Government of India, 1983 (for 1950-51, 1960-61, 1970-71, and 1975-76)

(ii) 'Second All India Educational Survey', National Council of Educational Research and Training, New Delhi, 1976 (for 1965-66)

(iii) 'Education in the Fifth Five Year Plan (1974 1979)', Ministry of Education and Social Welfare, Government of India, 1972 (for 1955-1956)

(iv) 'Selected Educational Statistics (1980-81 & 1981-82)', Ministry of Education and Culture, Government of India, (for 1980-81 and 1981-82)

(v) 'Fourth All India Educational Survey', NCERT, New Delhi, 1980

(vi) 'Fifth All India Educational Survey', NCERT, New Delhi, 1990

One must feel assured that the change is taking place in the desired direction and the benefits have started accruing to disadvantaged populations and female children, since, compared to the total percentage increases, the increases in these sub-populations have been much higher

Universal Retention: Prior to the publication of the Fifth Survey, the write-ups, both popular and scholarly, have been unanimous in saying that the problem of drop-out and stagnation (or repetition in classes) has been plaguing the primary education system and negating the progress achieved in attracting the children to school It has been universally accepted and widely quoted that about 60 per cent children leave school before they complete Class V The data of students flow in Classes I-VIII presented in Table 4 corroborate that the retention rates of children at the primary and upper primary stages have been stagnating between 33 to 38 per cent and 22.7 to 24 4 per cent, averages being 35 4 per cent and 20 5 per cent, respectively, during 1964-1978, i e for the last 15 and 12 years The figures in the second bracket, which represent the percentage enrolment in Classes V and VIII over those enrolled in Class I, also support the same conclusion (ranges being 27 2 to 39.6 per cent and 16.4 to 22 2 per cent, respectively). Redundant to say, these two indices are highly correlated These data clearly demonstrate that while the GERs increased during this period, the retention rates did not

However, substantial increases in retention were witnessed between 1978-86 both at the primary and upper primary stages as reported in the Fifth Survey The increases in the enrolment ratios were accompanied with the steady increases in retention from 1978-79 onwards which culminated into the rates of 54.1 per cent and 36.4 per cent, respectively, in 1986, heafty increases of 16 7 per cent and 12 per cent over those of the Fourth Survey If one looks at these figures in isolation,

TABLE 4

Students Flow in School Classes I-VIII and Retention Rates During the Period 1960-61 to 1986-87

Years	Class I		Class V		Class VIII	
	Total	Girls	Total	Girls	Total	Girls
1	2	3	4	5	6	7
1960-61	1,33,91,347	46,80,909	—	—	—	—
	(100.0)	(100.0)				
1961-62	1,57,46,164	57,03,962	—	—	—	—
	(100.0)	(100.0)				
1962-63	1,64,01,417	60,23,285	—	—	—	—
	(100.0)	(100.0)				
1963-64	1,69,05,528	62,83,003	—	—	—	—
	(100.0)	(100.0)				
1964-65	1,82,40,602	69,48,612	49,64,247	15,21,406	—	—
	(100.0)	(100.0)	(37.1)	(32.6)		
			(27.2)	(22.0)		
1965-66	1,88,83,970	73,09,790	53,81,366	16,83,795	—	—
	(100.0)	(100.0)	(34.2)	(29.5)		
			(28.5)	(23.0)		
1966-67	1,95,33,259	75,11,283	57,10,325	18,27,741	—	—
	(100.0)	(100.0)	(34.8)	(30.3)		
			(29.2)	(24.3)		
1967-68	1,97,50,974	76,37,372	59,20,639	19,46,193	32,44,645	8,63,354
	(100.0)	(100.0)	(35.0)	(31.0)	(24.2)	(18.4)
			(30.0)	(25.5)	(16.4)	(11.3)
1968-69	1,98,35,890	76,95,708	60,42,209	20,11,469	34,59,461	9,36,647
	(100)	(100.0)	(33.1)	(28.9)	(22.0)	(16.4)
			(30.5)	(26.5)	(18.1)	(12.2)
1969-70	1,99,42,055	77,78,779	62,49,417	21,00,326	36,16,774	9,89,776
	(100.0)	(100.0)	(33.1)	(28.7)	(22.0)	(16.4)
			(31.3)	(27.0)	(18.1)	(13.4)
1970-71	2,04,38,788	79,24,508	64,55,109	21,84,437	37,43,951	10,42,492
	(100.0)	(100.0)	(33.0)	(29.1)	(22.1)	(16.6)
			(31.6)	(27.6)	(18.3)	(13.2)

1971-72	2,11,18,992	82,13,094	66,23,731	22,65,014	38,35,751	10,90,540
	(100.0)	(100.0)	(33.5)	(29.7)	(21.0)	(15.7)
			(31.4)	(27.6)	(18.2)	(13.3)
1972-73	2,17,51,947	87,10,611	69,49,504	24,06,786	39,55,524	11,51,880
	(100.0)	(100.0)	(35.0)	(31.3)	(20.9)	(15.8)
			(31.3)	(27.6)	(17.8)	(13.2)
1973-74	2,15,50,516	85,04,478	71,79,048	25,54,553	40,40,378	11,76,798
	(100.0)	(100)	(36.0)	(32.8)	(20.7)	(15.7)
			(33.3)	(30.0)	(18.7)	(13.8)
1974-75	2,19,75,542	86,69,345	75,15,743	26,36,002	42,14,680	12,45,816
	(100.0)	(100.0)	(36.8)	(33.3)	(21.3)	(16.3)
			(34.2)	(30.4)	(19.2)	(14.4)
1975-76	2,19,87,593	87,12,804	78,48,656	27,77,442	44,35,764	13,20,559
	(100.0)	(100.0)	(37.2)	(33.8)	(22.8)	(17.2)
			(35.7)	(31.9)	(20.0)	(15.9)
1976-77	2,27,24,536	91,85,204	81,87,777	28,91,726	45,54,847	13,85,322
	(100.0)	(100.0)	(36.9)	(33.2)	(22.8)	(17.8)
			(36.0)	(31.5)	(20.0)	(15.1)
1977-78	2,11,27,331	84,28,795	83,74,954	29,52,175	47,21,813	14,53,672
	(100.0)	(100.0)	(38.9)	(34.7)	(23.1)	(18.3)
			(39.6)	(35.0)	(22.3)	(17.2)
1978-79	2,25,20,818	91,28,945	82,12,356	29,26,603	49,94,515	15,41,961
Fourth AIE Survey	(100.0)	(100.0)	(37.4)	(33.8)	(24.4)	(19.4)
			(36.5)	(32.1)	(22.2)	(18.3)
1978-79	2,16,39,468	87,21,757	84,78,011	30,11,600	50,12,525	15,83,564
	(100.0)	(100.0)	(38.6)	(34.7)	(23.7)	(19.3)
			(39.2)	(34.5)	(23.2)	(18.2)
1979-80	2,15,93,833	86,88,807	88,93,290	31,79,541	53,58,703	16,66,368
	(100.0)	(100.0)	(40.4)	(36.5)	(24.2)	(19.1)
			(41.2)	(36.6)	(24.0)	(19.2)
*1980-81	2,30,52,579	90,75,675	96,85,712	35,19,509	58,42,759	18,34,774
	(100.0)	(100.0)	(42.6)	(38.3)	(27.1)	(21.5)
			(42.0)	(38.8)	(25.3)	(20.1)
1981-82	2,21,65,341	90,06,206	1,01,60,185	36,80,911	62,08,509	19,54,233
	(200.0)	(100.0)	(48.1)	(43.7)	(28.3)	(22.5)

			(45 8)	(40 1)	(28 0)	(21 7)
1982-83(E)	2,27,10,608	92,87,200	1,05,72,688	40,66,244	65,36,939	20,92,984
	(100 0)	(100 0)	(48 9)	(46 6)	(29 7)	(24 2)
			(46 6)	(43 8)	(28 8)	(22 5)
	@2 46%	@3 20%	@4 20%	@5 57%	@5 29%	@7 10%
1986-87	2,48,90,467	1,04,46,305	1,22,96,768	47,06,771	78,52,098	26,48,310
Fifth AIE Survey	(100 0)	(100 0)	(54 1)	(50 7)	(36 36)	(29 2)
			(49 4)	(45 1)	(31 5)	(25 4)

Note i Figures in the first bracket indicate the retention of children in Classes V and VIII over those enrolled five/eight years before These may be construed as cohort data

ii Figures in the second bracket indicate per cent of children in Classes V and VIII over those enrolled in Class I during the same academic year

* The figures in the rows are apparently doubtful Since they are from an authentic source, they have been kept intact

Source i 'Selected Educational and Allied Statistics', Ministry of Human Resource Development, Government of India, 1987

ii 'Fourth and Fifth All India Educational Surveys', NCERT, 1980, 1990

(E) As the figures for 1982-83 were not readily available, the average percentage growth given under each column at @ was calculated on the basis of the increases of 1986-87 over 1981-82 This average percentage growth was used to estimate each of the figures shown against 1982-83

they look rather small. But when one compares them with the average rates of retention stagnating at 33.9 per cent and 23 4 per cent for both the stages for the last 15 and 12 years, one gets elated, as the country has been able to break away from the static past This has happened in spite of the fact that the number of elementary school-age population has swelled along with the total growth of population

Lest it is missed, the more heartening aspect of the retention rates, like the enrolment ratios, the retention rates for girls at the primary and upper primary stages registered 16 9 per cent and 9.8 per cent growth in 1986 over 1978. The growth in the GERs reported earlier clearly shows that the growth at the upper primary stage outweighed the growth at the primary stage, indicating thereby that the child who completes the primary cycle of education continues her/his education further into the upper primary stage This should be considered a boon since some sceptics have already been talking about confining our goal of provision of basic education for all to five years of education only. These data give strong positive signals to all of us that the country has doubtless taken off and, given the strong political will and determination, we can transform the take-off into a movement which may lead us to the cherished goal of universalisation of elementary education by 2000.

Quality of Elementary Education

One would be labeled a smug if he/she pronounced that the expansion which has taken place in elementary school education in the country is of quality It is certainly not While the number of good schools which can be compared well with any in other countries increased, a disproportionately large number of sub-standard schools also came to be established to meet the increasing demand for education. It is an open secret that today there exist two distinct streams of education, a small number of public/private schools, flushed with funds and facilities, and government or government-aided schools, with meager funds and inadequate facilities Some of the factors which have been hindering qualitative improvement are inadequate physical and educationl facilities such as buildings, playgrounds, urinals, etc , libraries, play materials, game materials, audio-visual aids, etc., and inadequate number of teachers and curricular materials which lack relevance and functionality

Type of Buildings. There has been some improvement in the availability of pucca/partly pucca school buildings in 1986 It is interesting to note that the percentage of such buildings for upper primary schools was higher than that for primary schools, i e 87.74 per cent against 72 54 per cent

Availability of Teachers: It is not an exaggeration to say that improvement in the quality of education would ultimately depend upon the quality and motivation of teachers The following table presents a dismal picture of the availability of teachers, leaving aside the question of their competence and motivation

% of Primary Schools with	
Zero teacher	0.42
One teacher	28.91
Two teachers	31 91
Three teachers	15 11
Four teachers	8.88
Five or more than five teachers	14 83

It is a dreadful state of affair that only 14 83 per cent of primary schools have five teachers on their roll One would suspect that this may in all probabilities represent a miniscule number of good public/private schools. In contrast to this, 61.24 per cent of primary schools were two-teacher schools. Calculation of pupils per school and per class within a school of the Fifth Survey data provides the following picture

Class	I	II	III	IV	V	Total
All	39.4	28 9	25 9	22 3	19 5	136

Since it is not known whether a single teacher school is also a single room school, the fact is, on average, there were 136 children per school. This means that there were more than 61.24 per cent schools, i.e. 380,613 with 52,579,369 children which were more or less like a magnified non-formal education centre. Coupled with this is the chronic problem of teacher absenteeism. No doubt, this has adversely affected the quality of education.

Pupil Achievement The above discussion makes it difficult to believe that our children are learning at all. And yet, inspite of aweful school conditions, depressed home conditions and poor quality of teaching, they seem to be doing fairly well. Of course this is strictly the author's personal opinion which has been challenged over and over again either on the basis of qualitative judgements or limited data. The ultimate criterion for judging the efforts made to universalise elementary education is to assess whether, as the WDEFA document puts it, the children have attained an acceptable level of learning.

For some time, a controversy has been raging in this country about what levels of learning the primary school children are achieving. When reasonably valid and reliable data are presented in support of a hypothesis that, on average, the primary school children are at least achieving an acceptable level of learning, scepticism is voiced. Perhaps, the bone of contention seems to lie in defining the acceptable level of performance. In claiming the achievement of primary school children reasonably well, the criterion of 35 per cent marks has been used as a minimum or acceptable level of achievement. The boards of examinations declare a student failed if he/she receives less than 35 per cent marks in any subject. The same criterion was in vogue in the past for promoting a student to the next class. Such a criterion, it is argued, is good enough for defining an acceptable level of pupil achievement and, therefore, has been used in interpreting the results presented below.

All India level projects implemented through 1975-76 to 1984-85 with the help of the NCERT in the States and Union Territories (UTs) have provided sufficient data to draw the following two conclusions

1. Achievement of pupils in language in Class I was found to be excellent (60%+), good in Class II (50%+), better than minimum in Class III (35%+) and minimum (acceptable) in Class IV (35%). Achievement of the pupils in mathematics was found to be excellent in Classes I and II, good in Class III and poor in Class IV (35%). Achievement of pupils in environmental studies was found to be more than excellent in Classes I and II. Achievement of pupils in science was found to be slightly less than good in Class III and poor in Class IV. Achievement of pupils in social studies was slightly less than good and a bit below minimum in Class IV.
2. Achievement of the pupils of projects schools, who were exposed to the process of curriculum renewal, was significantly better in all the three subjects (except in language in Class I) in all the four classes, than those in non-project schools who were not.
3. While the overall achievement of pupils in Classes I and II was quite satisfactory, there was a slump in pupil achievement in all the three subjects in Classes III and IV. However, the average achievement of the pupils of project schools was not lower than the minimum level.
4. The results obtained through the evaluation of Project Nutrition Health Education and Environmental Sanitation (NHEES) from eight States also corroborate the above results for all five

> classes, i.e. the overall achievement of children in the subject was found to be highly satisfactory, and the pupils exposed to the new curriculum package in project schools acquired better knowledge, understanding and application abilities than those pupils in non-project schools who were not

The message is absolutely clear: Given the opportunity and conducive learning environment, Indian children are capable of achieving a higher level of learning The question, however, is· whether the country would give a chance to the first generation learners and a second chance to the drop-outs or push-outs to prove their worth, or there will prevail an endless debate on the issue of pupil achievement in the country.

Salient Issues

The topic like this, which has a great relevance to the fate of generations of learners, cannot be devoid of problems and issues which defy solutions/answers, especially in a country like ours where exist wide disparities in socio-economic conditions and, perhaps, wider differences in ways in life, that is, the rhythm and life styles of different people As a result, there are bound to be differences in perceptions and opinions on one and all issues. Nevertheless, one would surmise that the genius of the nation would lie in evolving a consensus on the fundamental issue like 'the right of a child to basic education'. But that is not to be Polemics on the issues continue at the cost of the interests of the young child. Some of such issues have been discussed below since they have bearing on the theme under discussion.

Changes in the Total System of Education

The sooner it is realised that it is nearly impossible to usher in a change in a sub-system without carrying out a simultaneous change in the total system, the better it is for the country For too long, it seems, the change in the system of education is pursued without considering its linkage to the other sectors of the total system. This is no place to discuss the linkage of education with the other sectors of the total system except to say that dwindling allocations of funds to education from the initial plan to the present plan leaves an unsavoury impression on the mind of people—common man and scholar alike—that either the leadership of the country is not serious about fulfilling the basic right of the young child or is incapable of understanding the issue at hand, leave alone its consequences in future.

It is a sheer coincidence that the remarks relevant to the change in the system were made by the finance minister at a recent public meeting on Literacy organised on 8 August 1991 by the Ministry of Human Resource Development (MHRD) The comments are extremely pertinent, for they were aired in the context of raising the literacy rate in the country The report was carried under the headline "Literacy gets top priority". The quote is reproduced for reference

> "Mr Manmohan Singh said people believed that by waving the magic wand of subsidy, poverty could be removed This psychology of dependence on the government has to change We have to provide the tools to empower themselves, he said" (The Times of India, 1991).

Needless to mention there was not only one wand that the socio-political leaders and their allied government officers have been waving, while it was the wand of subsidy which was waved in the sector of economy, many brands of wands, including subsidy, were waved in the other sectors of the system, particularly in the education sector. Apart from the magic wand, as has been rightly pointed out by the finance minister, the most serious malady that has crept in the system is the syndrome of dependence on the government.

Let us pause and ask, why did people develop dependence on the government, the people of India who, by nature, appear to be staunchly individualistic? To put the blame on people will be a grave mistake A greater proportion of the blame will have to be taken by those who were trusted to govern It is common knowledge that the crucial factor in governing is the locus of power and, consequently, the locus of control over the process of reward and punishment There has been an abuse of both power and control, resulting into the undeserving getting rewards and the deserving getting punishment, whosoever may they be and whatsoever work they are engaged in As a result, gradually a system has got evolved and nurtured where every one waits or, better put, is made to wait for the superior to hand over decisions The travesty of the situation is that, if something goes wrong with the implementation of the decision, it is the subordinate who becomes answerable and not the superior who has taken the decision. In a society where punishment is more frequently given than rewards, it is a tall thing to talk about empowering people. The major question is whether the top brass in all sectors of the government are really serious in letting the power go in the hands of grassroot workers. One is rather doubtful!

And yet, the change must take place in the style of management if the goals are to be accomplished. Elementary education, as a part of the national system of education, is inflicted with all the ills and problems that are faced by the total socio-political and economic system. It is more so since it has to depend upon the other sectors for support For illustration, if a teacher keeps the educational aids locked up in a box, instead of using them in teaching children, one can easily trace the reason in his/her anxiety of being answerable for the loss of equipment to the department, which is, in turn, governed by the so-called audit rules and regulations of the finance department How can one liberate an ordinary teacher from this genuine fear? The point which needs serious consideration is whether it is possible to initiate and sustain a change in the sub-system in isolation, that is, without introducing a simultaneous change in the larger system. Certainly not Therefore, it is imperative that planning and implementation of the plans for EFA should be done keeping the national system of education in view.

All evidence indicates, including the world declaration on EFA, as if the universalisation of basic education is the ultimate goal. Viewed in the pespective of the total system of education, it can be, and should be, considered a terminal goal It should be realised that to universalise elementary education is to have tremendous repercussions for the next stage of education. Similarly, the attainment of 100 per cent literacy, particularly if one would like to arrest the regression of literates into illiteracy, will have a bearing on programmes of continuing education. Obviously, the achievement of total literacy of children in the 6-14 age-group is going to throw up grave problems for the upper stages of education, even if a large majority of them may prefer to discontinue their formal education (It is a million dollar question whether, in fact, these children would not aspire to climb the ladder of education as high as they could Mind you, education raises ambition and craving for improving one's own quality of life). Needless to mention, even with heavy drop-outs at every terminal stage, there is cut-throat competition for admission not only to the professional courses but also for the ordinary courses in sciences and humanities at the collegiate level It is one thing to zealously pursue the goal of universalisation of elementary education, but it will be altogether another thing to face socio-political unrest and upheavel as a consequence of educational transformation. The issue, therefore, demands a great deal of thinking in planning for universal elementary education in the context of, and as a part of, the total system of education

Macro versus Micro View of UEE

A passing reference was made to the power and control wielded by the macro-level leaders and government officers on the total system, causing the syndrome of dependence in the micro-level workers. The same argument is stretched a step farther. How are these macro-level pronouncements received at the micro level?

Frankly, there is scepticism about the moves made at the macro level. As micro-level workers, they have experienced that the kind of attention and support needed for the implementation of a scheme or programme or even a small project will not be forthcoming Numerous evaluations of projects on universal primary education the world over, time and again, have shown that the upper officialdom wakes up only when the expert international team arrives on the scene for assessing the impact of the project Once the inauguration ceremonies are over, the poor project team at the grassroots level struggles against all kinds of odds, mainly emanating from indecisiveness of or delayed decisions given by the top, to keep the flag of the innovative project with the original motto flying

In the lingo of systems analysis, relating to the set goal by each and every member of the team, and literally everyone—from the macro-level officer to the micro-level field worker—is the precondition for ensuring success in the implementation of a programme/project/innovation or altering the existing system. As the socio-political and economic system in the country has evolved over the years, the issue of managing the system has become 'macro versus micro and centralisation versus decentralisation'. The experience gained in implementing the centrally sponsored schemes in the country and innovative projects all around the world also corroborate this point of view. The solution to the problem is not pitting macro against micro, thereby taking a confrontist stand. Both are essential parts of the system and are needed for development. The critical problem has been the evolution of an unequal partnership between the two — a hierarchical chain of commands, an autocratic style of functioning where power is derived from the position and not from the competence or knowledge one possesses in performing a task. To tackle this problem, in the systems analysis jargon, superiors must learn to draw their strength not from their position but from the competence that they possess in performing the given task. They should have humility to accept and appreciate the competence of the so-called subordinates when they excel in performing the task assigned. The need of the hour is to develop and nurutre an effective and interactive partnership. We must resolve that so far as the tasks relating to universalisation of elementary education are concerned we are all comrades. Each one of us has potential to be a facilitator and has capability for sprouting an innovative idea.

Meeting Basic Learning Needs

As early as 1973, Coombs, et al. generated the concept of 'Minimum Essential Learning Needs' (Coombs, et al., 1973, p. 13). The WDEFA document has discussed a similar idea under Article 1 as 'Meeting Basic Learning Needs'. According to them:

> "These needs comprise both essential learning tools (such as literacy, oral expression, numeracy and problem solving) and the basic learning content (such as knowledge, skills, values, and attitudes) required by human beings to be able to survive, to develop their full capacities, to live and work in dignity, to participate, to live and work in dignity, to participate fully in development, to improve the quality of their lives, to make informed decision, and to continue learning." (1990, p. 3)

Instead of clearing the concept, the above statement adds to the confusion already prevailing about learning needs, leaving aside 'minimum' or its replacement by 'basic'. When one reads the above definition/explanation, one gets an uneasy feeling of receiving messages from the platform occupied by macro-level leaders whose bonafides are suspect. Without going into the debate regarding the nature of learning needs, perceived needs or felt needs, defining needs as 'tools' and 'content', it is essential to examine how the message of the need for basic education and literacy will be received by the consumer, viz. both the young and adult learners? Their queries can be verbalised as follows:

> Why do you want to educate me? For the head counts so that you can declare at yet another world conference that all heads are in. Why so much fuss about five or eight years or any number of years of basic education? Perhaps, you want to wash your hands off as soon as so-called basic knowledge and skills are acquired by me. But why should I stop at a particular stage? After the exposure to new knowledge and skills, I am enlightened and my aspiration level has been raised. What the avenues are for me to go as far as I could. If you have not thought about all these, then

> please do not persuade me to be literate just for the sake of being literate So far as knowledge and skills in language and mathematics are concerned, may be I am not as good as my friends in school, but when it comes to knowledge and skills in work situations, I think, I am far superior to them While I am belittled being illiterate in language and mathematics, no one belittles those who cannot and would not soil their hands or do any socially useful productive work I do get punishment without getting any credit for productive skills I possess in plenty Please also remember that the radio and television are giving me a lot of useful information and I do not feel the handicap of not being able to read and write By the way, I am good at exchanging money in my day-to day transaction

As was mentioned earlier, the change, or goal setting in the sub-system should be done keeping in view the total system. From the consumer's point of view also it is imperative that horizontal and vertical mobility from one channel or sub-system to another channel or sub-system is fully ensured. It further demands that alternative channels, non-formal, informal, open school or for that matter any other channel, are compatible At present it is not so, the system is rigid with no room for mobility The non-formal channel is indeed meted out a discriminatory treatment, and is yet to be perceived by the consumer as a good alternative to the formal system of primary education The question here is of equity As regards the question of right to education, if we cannot make positive discrimination for the disadvantaged population, it should be ensured that the alternative channel receives an equal amount of financial and equal quality of educational resources

Role of Government and Non-government Agencies

Interconnected with the question of macro-micro level planning and implementation of educational programmes is another controversial issue of the role of government and non-government agencies (NGOs) or voluntary agencies (VAs) There is no doubt that in the public eye, the government agency and its agent, the government official, stand discredited for the reasons elaborated earlier As a matter of fact, most of the failures in project implementation stem from mismanagement and poor administration However, another fact which needs to be acknowledged is that the micro-level implementation has been found more successful when there is collaboration between the government and non-government functionaries such as district collector, school inspector, headmaster, parents and teacher. As was observed before, what seems to work is the effective, interactive partnership or comradeship

To be fair, it needs to be admitted that not all non-government agencies running development programmes are creditable, efficient and effective. On the contrary, quite a number of privately managed schools and non-government agencies are no better than their counterparts under the government The fact which has not been highlighted and debated so far is the need for continuous flow of funds to non-government agencies Even some good non-government agencies face the resource crunch, and many of them heavily, if not totally, depend upon the government or international institutions for support Exceptions cannot be the rules in running massive programmes of education. Besides, one cannot rule out the possibility of the development of dependence syndorme under a non-government organisation also Empowering people is a complex problem It is easily said than done. Many will also contest the claim that efforts of NGOs and privatisation of school education have helped in attaining the goal of universalisation of elementary education or improving its quality. The fundamental question is how to make the system and sub-system work efficiently? Again, it is not the question of opting for one or the other.

Availability and Utilisation of Resources

The anatomy of implementation or execution of UEE programmes/projects/innovations has been examined It has been argued that the sickness in the total system has been adversely affecting the sub-systems and their parts The question of resource constraint seems to be disproportionately magnified both by experts and laymen. Had this been the case, some of the developing and/or least developed countries would have universalised primary education long ago, for in terms of local currency, the loan or aid received by them during the last decade was more than adequate The fact of the matter is that during the years when the loan(s) and/or aid(s) had been received, in some countries the GERs had remained stagnant, meaning thereby that they had been able to barely absorb the increase in the primary school-age population The implementation of a large majority of projects financed by international agencies has indicated that not more than 30 per cent of the funds made available were utilised by the participating States in India A thorough and ubiased analysis of utilisation of the funds provided under the centrally sponsored schemes to the States would not tell a different story. The shortage or inadequacy of funds is a myth As a matter of fact, the states in their present position simply do not possess the capacity to absorb the flush of funds. It is not out of place to also recall what the late Rajiv Gandhi said about the percentage of social welfare funds really reaching the actual beneficiaries He observed that not more than 15 paise of every rupee alloted for the beneficiaries reached them. One can bet his honour if the same thing did not happen if more funds are provided to educational programmes without chalking out a meticulous plan for implementation of projects after having done a rigorous quantitative situational analysis of every component of the programme proposed to be launched

Qualitative versus Quantitative Approach

All along, approach to solving educational problems in India has been not only ad hoc but also mostly qualitative On the one hand, the management information systems (MIS) are being installed for the purpose of monitoring and evaluation of UEE programmes; on the other, most of the actions and decisions for implementation are taken on some kind of intuitive hunches or purely personal beliefs or fancies. Whenever one talks about data or research findings, especially quantitative data, it falls on deaf ears When it comes to economics, agriculture, commerce and other fields, even a layman is willing to accept quantification, e g inflation rate, percentage price rise, cost of living, etc. But as soon as one starts quoting the growth of GER or percentage drop in retention rate, all kinds of objections such as, reliability of information, inflation of figures, parity of figures, unsuitability of statistical techniques, etc. are instantly raised One experiences stiff resistence to application of quantitative techniques to solving problems in the field of education The glaring examples, with the exception of pre-NPE 1896 document "Challenge of education", are our documents on the national policy on education, the national curriculum, the teacher education curriculum, and many others, which do not carry even a bibliography, thereby giving an impression as if no quantitative analysis is possible or no research findings are available or needed for the formulation of these. The reality of the situation is that nobody is bothered about the research conducted in education Universities are merrily busy with so-called pure research for the sake of research, and the policy-makers are equally contemptuous of its relevance to their tasks. There is a clear divide between the advocates of qualitative and quantitative approaches and hence an impasse. This needs to be broken. In a fast-moving world of hi-tech informatics the country can ill-afford to depend upon an opinion-oriented decision-making process

Therefore, there is a dire need to opt for sharpening the tools and techniques for collecting information on the major indicators of progress achieved in UEE such as, location of school, availability of educational facilities, number of pupils in school(s), number of drop-outs and their follow-up, number of repeaters, percentile of pupil achievements on standardised tools (tests), availability of teachers, per capita cost of pupil, etc This has to be evaluated on a scientific and continuous basis Differently put, the objective and data-based decision-making process needs to be institutionalised at the earliest. Hence, a comprehensive data base should be created and linked with the other data bases e.g NICNET, INDONET, and should be accessible for not only taking policy decisions but also for analysing data and simulating alternative models for adoption to specific needs of emerging situations For example, how one can decide whether one needs more primary schools or not There can be no other approach to answering this question except quantification. A primary school child requires a certain minimum sitting-space in a classroom Precise norms for space requiremment with or without furniture commensurating with the age of children are available. These can help determine the space required to accommodate an *n* number of children, which, in turn, can accurately help estimate how many classrooms are required for accommodating the *n* number of children in a particular year. Why should such a decision be based on an armchair speculation and not on the quantitative data? But the fact is that there is a lot of resistence and reluctance to adopt such a quantitative approach to education

A brief analysis of the class-wise percentage enrolment of children in 1986 showed that there was additional sitting-space for about 11, 14, 18 and 21 children in Classes II, III, IV and V, respectively, in the primary schools of the country (norm being 40 children per classroom) If all were only two-room schools, one more room would suffice to accommodate the entire primary school-age population Similarly, with great precision, location of school(s) can be determined and accurate estimate of textbook requirement can be made if systematic information on key factors of both components are collected and processed for decision-making. These are just a few illustrations It is asserted that almost every component of schooling can be quantified and used for efficient management of scant resources. If the paper producing countries like Sweden, Norway and even tiny Finland could plan a long-range programme of growing of forests solely with a view to commercially producing printing paper in such a way that ecological balance is not disturbed, managing elementary education should be a child play What really needed is a change of attitude.

Future Prospects

Since an impassioned plea has been made above in favour of quantitative analysis, the author cannot escape the responsibility of making future projections on the basis of such an analysis Under Section 'The Past', it was pointed out that the scenario of elementary education had changed for better since 1978-79. From 1964-65 to 1978-79, i.e. for 15 years (12 years for the upper primary stage), the retention rates remained stagnant However, between 1978-79 to 1986-87, there were considerable increases which could be construed as take-off points No doubt, the momentum has been gained and the pace has been accelerated The next decade should be considered as a decade of "DO OR DIE". The country has taken off despite all conditions remaining the same No special efforts appeared to have been made for this change In fact, the country had seen more socio-political turmoil during 1978-79 and 1986-87 Despite those adverse conditions, we have achieved growth and progress If systematic and serious efforts are made, specially overcoming the impediments that have been highlighted under the heading 'Issues', there is still a pretty good chance of achieving the cherished goal

Projections for School Requirement

At the risk of being ridiculed, the author asserts that the goal of universal enrolment and retention at the primary stage is within our reach by 1995. The same to be accomplished at the upper primary stage would require more vigorous efforts and larger investments than what have been made so far

TABLE 5

Projections of Primary and Upper-primary School Requirements between 1990 2000

	1985	1990	1995	2000
Projected school age[1]				
Population 6-10	91,405,000	97,353,000	101,145,000	102,310,000
Population 11-14	53,997,000	54,414,000	59,206,000	60,656,000
Projected enrolment (P&UP)	100%	100%	100%	100%
Classrooms/teachers required				
Primary	2,285,125	2,433,835	2,528,625	2,557,750
Upper primary	1,349,925	1,360,350	1,480,149	1,516,400
Schools required				
Primary[2]	457,205	486,765	505,725	511,500
Upper primary[3]	449,975	453,450	493,383	505,466
Existing schools[4]				
Primary	631,308	631,308	631,308	631,308
Upper primary	187,602	187,602	187,602	187,602
New schools required				
Primary	–174,103	–144,543	–125,583	–119,758
Upper primary	+262,373	+265,848	+305,781	+318,159
% increase expected	% Observed between 1982-87			
Primary	@2.46	Base	% 3 86 @78	%5.09 @0.51
Upper primary	@3.12		% 8 81 @1 76	%11.47 @1 15

1 'Selected Educational and Allied Statistics', Ministry of Human Resource Development, Government of India, 1987

2. Two hundred students per primary school and 40 students per classroom, i.e 5 x 40 = 200 students.

3 One hundred and twenty students per upper primary school and 40 students per classroom, i e 3 x 40 = 120 students

4 'Fifth All India Educational Survey', NCERT, 1990 (Includes schools with primary and upper primary sections)

The macro-level analysis of available data for school requirements presented in Table 5 shows that the country has more primary schools than required for achieving 100 per cent enrolment Even in the year 2000, there will be a surplus of 119,758 schools However, the number of upper primary schools is inadequate even today It was observed that pressure on this sector had been increasing, for a child who completes five years of education persists in furthering his/her education. Even in 1985, there was a need for additional 262,373 schools to accommodate the influx of these children If the facilities are not expanded, there may be an exodus of these children from the education system In 1995 and 2000, additional 305,781 and 318,159 schools will be required, respectively. While the number seems to be very large, the percentage growth required during the decade seems to be within our reach Between 1982-87 (1981-82 as a base year), the average growth rates of enrolment for the primary and upper primary stages were 2 46 per cent and 3.12 per cent, respectively. If 100 per cent enrolment in both the sectors is aimed at, the total growth rates of 3 86 per cent at the average rate of 0 71 per cent per year and 8.81 per cent at the average rate of 1 76 per cent per year, respectively, up to 1995 are needed, the total growth rates of 5 09 per cent at the average rate of 0.51 per cent per year and 11 47 per cent at the average rate of 1 15 per cent per year are needed if the target for universalisation is deferred to 2000 However, in both the instances the percentage growth rates required are lower than those achieved during 1978-86, thereby strongly supporting the assertion that both the goals are within the reach of the country. It is not only the responsibility but also the duty of one and all to strive for this goal of EFA before the dawn of the twenty-first century

Changes in the National System Structure

Structure

- A statutory change in the structure of the elementary system of education should be made so that vertical mobility—from the formal channel to the non-formal channel and vice-a-versa—is ensured Also, the vertical mobility of children coming from the non-formal channel to the formal channel, i e. Class VI should be ensured
- Proper certificate, equivalent to the formal one, should be issued to the learners passing out of the non-formal channel
- The non-formal channel should be expanded as a continuing education channel for helping those who are likely to regress into illiteracy

Management

- Constitution of task forces of eminent citizens at the national level, state level, district level, block level and village level for overlooking the implementation of the plans prepared at the grassroots level and doing away with the dichotomy of government and non-government agencies

Planning and Implementation

- Creation of data bases at the district level on major components/indicators of elementary education.
- Ranking of villages and/or areas in the descending order on each of the major components.
- Identification of the most deprived or disadvantaged areas for providing the inputs required for growth
- Assessment of the capacity for growth of each of the areas, availability of resources and setting realistic targets for each area for development during the next decade

- Mobilisation of local resources, especially human resources such as unemployed educated girls, educated mothers, retired people, professionals and artisans in all walks of life and any others, for relating themselves to the goal of educating each and every child in the locality and providing assistance in cash and/or kind wherever possible. In a nutshell, developing a sound system of parent and community support to the local UEE programme on a permanent basis.
- Establishment of early childhood care and education centres (ECCE) within or near the school
- Mounting a campaign and exerting social pressure on parents for sending girls and other disadvantaged children in the fold of school or non-formal education centre

Academic

- Adjusting the school time-table to the local needs, particularly the seasonal demands of children's assistance on the fields or for any purposeful community activity.
- Organisation of clusters of schools for training and professional development of teachers, headmasters and supervisors; enlisting the help and cooperation of nearby teacher education institutes,
- Encouraging the use of programmed or self-paced learning materials for handling large classes and multi-grades in a single or two-teacher schools

Incentives

- Distribution of incentives such as uniforms, textbooks, nutritious meals/snacks and even compensatory financial allowances to the families living below the poverty line.

To sum up, concerted efforts have been made to move towards the goal of universalisation of elementary education These need to be continued while initiating actions for stimulation of the young child in the early years and strengthening the education component of the Integrated Child Development Scheme (ICDS) along with the expansion of preschool facilities in the country-side Having achieved some notable breakthroughs, as highlighted above, the pace of progress on its own momentum is bound to be accelerated But we cannot afford to be complacent A non-partisan, eclectic approach to the education of the young child should be initiated at the grassroots level in the spirit of comradeship We must have full faith in the capabilities of our grassroots workers in solving their own problems It is difficult to swallow the argument that the grassroots workers would not be able to manage a micro educational system for their own children, when they have shown capacity to build their own houses, till their own fields, produce grains/vegetables/milk, etc for the teeming millions of Indian people, weave some of the best fabrics in the world, carve out artistic creations in any medium, and do many many other things on their own. The time has come to empower them to take care of their own fate If 'green and white' revolutions have become reality today primarily due to their efforts, why cannot the 'literacy' revolution?

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Quality in Secondary Education: Its Relevance and Urgency

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FOR a country that gains its independence, and which has a huge educational backlog, the quantity dimension of the educational task assumes first priority. This is precisely what India did during the decades that immediately followed Independence in 1947. This quantitative expansion had, necessarily, to focus primarily on first level or elementary education and only to a lesser degree on secondary education. But, today, four-and-a-half decades later, mega changes have taken place in the world of knowledge, and, consequently, of technology. We face an electronic future. Hence the question of relevance and urgency of a policy shift to give greater attention to the quality of education at the secondary level, along with its quantitative expansion, as the expected minimum level of education to cope with the demands of the future would rise to the second level.

Since quantity, at the secondary level, is an essential prerequisite to quality, it would be appropriate to situate ourselves into the present context, in terms of quantitative expansion at the second level of education. When we look at school education in India, a matter of great concern is the degree of disparities that obtain, disparities between the urban and the rural, between the male and the female and between the scheduled caste/scheduled tribe and the rest of the general population. These differences and the absence of equity are more sharply present at the secondary level of school education. To give some idea of the size of this disparity: At the secondary stage, rural boys constitute only 23.40 per cent, while for rural girls, the all-India average is a dismal 8.05 per cent. The corresponding figures for urban boys is 66.91 per cent (including those who are above the mean age-range of 14-16) and that of urban girls is 35.77 per cent. At the higher secondary stage, the disparity between these figures is further sharpened. With the attainment of universal elementary education still remaining a tantalising dream, the case of secondary education is yet to get the attention and priority that it would seem to merit But isn't the time running out on us? Will history be kind to idlers? In today's world, a second level of education will become increasingly necessary, not to a few but to all or almost all It is also not enought that they have merely reached that second level, but have also attained an adequate measure of quality

If we look at the corresponding figures in the neighbouring countries, like Sri Lanka or Indonesia (and not those in the advanced countries), the relatively low percentage that succeeds to reach the secondary level of education in our country becomes a matter for concern

Quality Dimension

How to define quality? What constitutes quality in education? It can be defined in many ways and from many perspectives In situations that obtain in our country, with wide regional disparities, the mere criterion of efficiency will not do but will have to be linked with equity issues as well, when we talk of quality. Under this dual dimension of equity and efficiency, the author proposes to examine the quality dimension from policy documents and other important official reports, which deal with reforms for school improvement at the second level of education. We will look at this from the following five aspects:

1. Reforms in Structure and Scheme of Studies
2. Improved Textbooks
3. Teacher Education and Classroom Methodologies
4. Evaluation
5. Educational Management

1 Structure and Scheme of Studies

At the time of gaining Independence, the first Prime Minister of India, Pandit Jawaharlal Nehru, had stated:

> Whenever conferences were called in the past to form a plan for education in India, the tendency as a rule was to maintain the existing system with slight modifications This must not happen now Great changes have taken place in the country and the educational system must keep pace with them The entire basis of education must be revolutionalised

One of the early reforms was aimed at improvement of quality through transformation of education at the primary and secondary levels by integration of crafts with traditional book-centred learning. Gandhiji had the great insight that work can and should become an effective medium for quality education. The Secondary Education Commission (1952-53) had visualised the ideal pattern in the country as follows:

> Our secondary schools should no longer be single track but should offer a diversity of educational programmes calculated to meet the varying aptitudes, interests and talents which come into prominence at the end of the period of compulsory education They should provide more comprehensive courses which should include both general and vocational subjects and pupils should have the opportunity of choosing according to needs

A combination of adverse socio-cultural and economic conditions did not favour the success of the reforms The highly stratified society did not see manual work as anything relevant except for the lower rungs in the social ladder. The scope for earning a living through products of skilled art and craft work had been severely discouraged by the British and hence earning one's living, through cottage industries, could have only limited scope. Hence like the Basic Education, at the elementary level, the introduction of multi-purpose schools, at the secondary level, never took off in any big way The traditional three R's education was proving to be a good medium for white-collar jobs Though all the states had supported the policy of introducing multi-purpose schools in the states, following the recommendation of the Secondary Education Commission, only 2,115 multi-purpose schools were started throughout the country during the first and second Five Year Plans, out of a total of over 25,000 secondary schools

However well-intended, secondary education was still looked upon as a preparation for college and hence was not seen as terminal education, as envisaged by the Commission Hence less than 12 per cent of the students, enrolled at the secondary stage, opted for the vocational courses The American Technical Cooperation Mission (later the US Aid) had supported the reform, and the NCERT had set up four Regional Colleges for the training of teachers, specifically for the multi-purpose schools, in 1963-1964 By the time these teachers came out trained, some States had already and abruptly wound up the multi-purpose schools. The aid package promised by the centre to the states for starting these schools was an initial incentive. But opposition from teachers and higher income group parents, who attached great importance to academic and scientific education, and an equally strong criticism from the poorer sections of society who saw this as a conspiracy to keep them out of sharing the educational cake and better job opportunities that such an education offered, made sure that the reform would not go very far The role of language was another contributing factor Hindi, English and the regional languages were not perceived as sharing equal status, but inclusion of one tended to exclude another So, both the Hindi-speaking people as well as the non-Hindi speaking ones became agitated

The Education Commission of 1964-66 and the resultant education policy of 1968 laid down a uniform structure for the whole country of ten years of general schooling, followed by two years of diversified courses, including vocational courses. Though equity concerns are still high, in the 1986 Policy, namely concentrating on the unfinished task of building up the base of the educational pyramid, there is also a clear statement of intent that quality of the highest standard is also part of the policy concern, and of the structural change, adding a year at the school stage, so as to make it comparable to world standards To quote 'The main task is to strengthen the base of the pyramid, which might come close to a billion people at the turn of the century Equally, it is important to ensure that those at the top of the pyramid are among the best in the world'

The 86 Policy provided for vocational courses, but to be taken generally at the senior secondary stage, though there was provision for taking up vocational courses after eight years of schooling. The 1986 Policy says, 'vocationalisation through specialised institutions or through the refashioning of secondary education can, at this stage, provide valuable manpower for economic growth'. It had hoped for enhanced individual employability, reduction in mismatch between the demand and supply of skilled manpower, and keeping it as a distinct stream, ordinarily at the post-secondary stage, though also providing for its introduction after Class VIII It aimed at development of appropriate attitudes with knowledge and skills for entrepreneurship and for self employment, while also ensuring vertical mobility through bridge courses. It envisaged that ten per cent of the students would be diverted to the vocational stream by 1990 and 25 per cent by 1995.

In reality, the introduction of vocational courses suffered from the same attitudinal barriers, along with lack of proper coordination and linkage between vocational and technical education and manpower planning. As a result, in several states, the central funds could not even be fully used In terms of percentages, less than five per cent enrolled in self-chosen vocational courses

Improving the quality of schooling has been a concern in many parts of the world The International School Improvement Project (ISIP) began working in 1982 and continued till 1986. Its findings have been reported by David Hopkins (1987) School-based review or self-evaluation by the school for own improvement, the role and leadership by the Head of the school for improvement, the role of external support in school improvement processes, the relative roles and responsibilities of local and national bodies in curriculum development and the relevance of decentralisation etc. are some of the topics discussed in the book

A review of World Bank experience regarding the projects for introduction of diversified secondary curriculum from 1963-79 presented two main models: one that introduced vocational or practical subjects into a single stream and the second model that kept a distinct stream for vocational courses. The project objectives were aimed at meeting quantitative manpower needs, qualitative manpower needs, enhancement of employability, improving the quality of education, change of attitudes towards vocational subjects, use of specialised facilities by the community as well and provision of a balanced curriculum. For several reasons, such as lack of implementation strategies, inadequacy of specialised facilities, absence of instructional materials, unfamiliarity with the educational concepts and above all, shortage of trained teachers and negative attitude towards diversification meant that the final conclusions were far from clear or definitive about the objectives set.

The role of educational research for the development of education at present and in the future in Asia and the pacific region formed the topic of a regional seminar, at the initiative of the National Institute for Educational Research

(Tokyo, 1990). The major recommendations of the seminar were to initiate or to strengthen educational research and establish a national level body to monitor and co-ordinate all relevant educational research in the country, to have regional or state level centres for dissemination of available information and to enable eventual user agencies to see the need for research findings as useful tools for decision-making.

It was the quality dimension that prompted the American Report, A Nation at Risk (1983), which pointed to 'the rising tide of mediocrity that threatens our very future as a Nation and a people'. It reminded its readers that 'knowledge, learning, information and skilled intelligence are the new raw materials of international commerce and are spreading as vigorously as miracle drugs, synthetic fertilizers and blue jeans did earlier' ... that 'individuals in our society who do not possess the levels of skill, literacy, and training essential to this new era will be effectively disenfranchised, not simply from the material rewards that accompany competent performance, but also from the chance to participate fully in our national life A high level of education is essential to a free, democratic society and to the fostering of a common culture, especially in a country that prides itself on pluralism and individual freedom' . . and 'the search for solutions to our educational problems must also include a commitment to life-long learning.'

Just as too little of education does not help development, too much of education, especially of the wrong kind, may equally be of little use "Learning without education" is what Ivan Illich pointedly calls it Meaninglessness, inefficiency and waste are the results.

What is the contribution of the home vis-a-vis the school in ensuring quality? An earlier study (Coleman, et al , 1966) did not find the schools contributing so much as homes, to enhance quality, in the developed countries, though in developing countries, this was not so

2 *Improved Textbooks*

The print media still hold the roost in terms of the most used and effective medium for education Hence the relevance of the textbook Some have described it as an 'assistant master in print' School education being a state subject, the states had also set up their own organisations for the development and publication of textbooks Most of the states had nationalised the production of school textbooks In varying measure, the states experienced difficulties in this critical area of textbook production lack of experience, paucity of suitable authors, shortage of good printing paper, dearth of quality printing presses, high cost of production, deficiencies in evolving a good design and layout for the production of the textbooks, etc The Third Five Year Plan identified the production of quality textbooks as one of the major problems requiring immediate attention The State Chief Ministers' Conference of May, 1961 recommended that the centre should prepare specimen textbooks for adoption or adaptation by the state governments

In pursuance of this recommendation, the NCERT set up a Central Committee on Educational Literature for Textbooks and since then has been a major contributor, at the all-India level, for the proper development of curriculum and textbooks. Very little research had been conducted in the country in the 60's on textbook preparation and production The NCERT was well equipped to take up this challenge Other national concerns such as national integration, population education, environment conservation and promotion of certain core national values and perspectives, as contained in the Constitution and in the education policy, were matters for introduction into the NCERT textbook and support materials

In the recent years, the newly developed textbooks coming from the NCERT have become more and more interactive, making it a teacher in print and greatly facilitating learning In the formal education set-up, there is no need for a programmed text as such But the present trend to make the text interactive and to provide for plenty of activities and scope for self-initiated work for the students, makes the NCERT textbooks find greater and greater acceptability and currency. As such, the NCERT has played a very significant role in developing textbooks of good standard This model building function was a critical contribution to enhance quality A World Bank study has highlighted this aspect of contribution to quality, at the national level, through textbooks developed and made available by the NCERT. Since the states have, for the most part, their own textbook development organisations, these would use the NCERT text only if they find it of good quality The present situation, across the country, is that practically every state is using, for all practical purposes, the basic text of the NCERT, though several states are introducing modifications and additions to suit the specific conditions in the state and region. It may, however, be noted that in the recent decades, the degree of commonality has appreciably increased in the curriculum prescribed by the different Boards of Education In fact, to go one step further, it is becoming clear, internationally, that much of the educational curriculum and processes have a common ground, while culture-specific components do retain a place. Hence the importance of a national standard set by the NCERT textbooks all over the country That is the reason why this contribution is important

3 *The Teacher and New Instructional Methodologies*

A well-designed curriculum and good textbooks will not result in good education, in the formal system, unless it has the backing of a good teacher as well. Three recent documents, one from the National Commission on Teachers (The Teacher and Society, 1985), the 1986 Policy (NPE, 1986) as well as the Ramamurti Review Committee Report (Towards an Enlightened and Human Society, 1990) highlight the role and relevance of the teacher for effective education

The 1986 Policy has placed immense trust in the teaching community. But an honest answer to the question 'have we taken our teachers seriously'? may embarrass us. The competence, attitudes, accountability and professionalism of the teacher are crucial. At the national level, the professional organisation of the National Council for Teacher Education is responsible for the development of appropriate curricula and courses for pre service and in-service education of teachers Presently, the programme is too theory oriented, isolated from the reality conditions of the schools, provides for little real practice teaching and provides little for the development of the affective domain nor for introduction to the modern perspectives, techniques and approaches to effective learning The new teacher would be an agent for social transformation and through personal commitment and capabilities, intervene in programmes and management to attain the goals of the community that one serves. As a profession, the teachers would have to be required to go though a training and internship that would be of longer duration than at present, and which would provide realistic field situations where one can practise teaching under supervision and learn from good role models, who are themselves skilled practitioners.

In the normal classroom and even in the prestigious schools, more often you are likely to find a single-medium teacher, namely one who uses teacher talk as the main medium for teaching There had developed, in recent years, almost a direct proportion between the standing of a school and the high percentage of students, not only in certificate classes but also in others, who take private tuitions, at additional high cost. There may also be a social factor involved in this. Multi-media teacher is what one would consider an effective teacher for effective learning Regular and judicious use of simple aids, providing a necessary variety to the standard fare that the students quickly yet bored about, a high degree of real interaction with the students, allowing for creative responses, for independent enquiry and project work, etc. would be some of the teaching-learning strategies. The system has developed a high degree of dependency on the part of the students, resulting in a major block to quality. As such, student capabilities remain undiscovered and undeveloped or under-developed

Repeatedly, during the hearings held by the National Commission on Teachers the professional teacher organisations expressed their desire to be involved in professional work, than be seen as narrowly engaged in union activities With such a high degree of centralisation, such serious and on-going consultation will remain superficial.

4 *Examination Reforms*

Student assessment, through various forms of evaluation, holds an important place in the total process of education But over the years, examination has come to assume and retain such a dominant role that it has become a case of the tail wagging the dog and strangely enough, the dog not minding it at all Examination was to assess the degree of student attainment, vis-a-vis the educational objectives or specified learning outcomes, and to be used more as a diagnostic tool or as a formative instrument than merely or mostly as a summative or judgemental device In the former case, the student gets a feedback, knows one's strengths and weaknesses and is encouraged to strive for higher results The Indian Universities Commission (1902) studied the programme of university examinations, including the matriculation It observed that secondary education had become only a preparation for the university entrance examination and carried forward the recommendations of the earlier Hunter Commission when it said

> Examinations are required only in order to determine how far teaching has been successful it is beyond doubt that the greatest evil from which the system of university education suffers in India is that teaching is subordinated to examination and not examination to teaching

The Radhakrishnan Commission (1948) has pointed out that examination reform was a matter of the highest priority Later, the Secondary Education Commission (1952-53), chaired by Mudaliar, had noted with concern· 'the matriculation examination began to dominate, not only secondary education, but even education imparted in primary schools' It went on to make elaborate recommendations, suggesting the reduction of the number of external examinations, introduction of objective tests, development of a proper system of school records, allotment of due weightage for internal tests, etc The Central Advisory Board of Education (CABE) in 1970 made comprehensive recommendations And finally, the 1986 Policy envisaged that evaluation be seen as a continuous process, so as to assist the student to improve performance Specifically it saw examination as an instrument to improve the quality of education. It called for removal of subjectivity in examinations, deemphasis of memorisation, continuous and comprehensive internal assessment of both scholastic and non-scholastic achievements, improvement of conduct of examinations, introduction of concomitant changes in instructional material and methodology, introduction of the semester system from the secondary stage, and use of grades in place of marks

It is a real surprise that what has been said so cogently and clearly so long ago remains a begging and unfulfilled, in such large measure It must, however, be recognised that many efforts have been made by the Boards of School Education all over the country to introduce examination reforms, in areas such as the following developing a proper design and blueprint for the question paper, appointment of trained paper-setters and evaluators, allotment of weightage in the syllabus for a particular set of topics, improvement of the wording of the questions to make them specific, introduction of objective-type questions, and others requiring very short answers or short answers along with extended or essay-type answers, abolition of overall options in the paper and giving only internal choice between questions, and development of a carefully worked out and detailed marking scheme, etc The Boards have also introduced the use of computers for data processing and declaration of results and the print-out of marks statements and certificates, etc Provision for allowing the students to improve their performance at a subsequent examination, to clear the examination in parts than at one sitting, incorporation of both academic and non-academic areas of pupil achievement in the certificate as well as organised and planned studies of examination performance through research, are confined only to a few Boards. If examination is seen as essentially and critically linked to the quality of education and if so many concrete suggestions and recommendations have been made over the past decades, why have so many of these remained only partially or poorly carried out? There would seem to be strong vested interests at work, preventing reform, apart from the built-in lethargy of the educational administrators to change the status quo

The Ramamurti Review Committee has pointed out that examination reforms will have little impact, unless they are implemented as a package including the following items.

- Introduction of the semester system
- Continuous internal evaluation, ensuring its integrity and providing for disaggregated evaluation and catering to individual differences
- Making teachers responsible for evaluation
- Movement from one stage to another through an entrance test
- Modularisation of the courses and freedom to the students to choose modules than be compelled to take the whole course
- Provision for credit accumulation by the students and for transfer of credit from one institution to another; facilities for multiple entry and thus opening up and non-formalising the school system.

The Review Committee has also suggested the setting-up of an Examination Commission

5 *Decentralised Educational Management*

The 1986 Policy made a clear pronouncement about 'making the system work' and has provided the following guiding considerations· (a) evolving a long-term planning and management perspective, and its integration with the country's developmental and manpower needs, (b) decentralisation and creation of a spirit of autonomy for educational institutions; (c) giving pre-eminence to people's involvement, including association of non-governmental agencies and voluntary effort, (d) inducting more women in the planning and management of education, (e) establishing the principle of accountability in relation to given objectives and norms.

The highly centralised approach that obtains has not delivered the goods intended Unless the quality of government and government-aided schools improves appreciably, as this forms the vast majority of schools, there is hardly any hope of making any mark on the quality dimension, at the national level The need to give necessary administrative and financial powers to the Heads of secondary schools was discussed in a national seminar at the National Institute of Educational Planning and Administration (NIEPA) (December, 1989) and clear recommendations were evolved for empowering the Heads of secondary schools to have the means to function as Head So far, these recommendations have not found any application in the field. Let us say that a decentralised pattern would lead to some abuses. But will these be any greater than what is obtaining now? One of the major recommendations of the Ramamurti Review Committee is to evolve decentralised educational management, not merely decentralising from state to district, but coming down to the grassroots level, namely a cluster of schools supervised by a duly established local management. The major hitch would seem to lie in one's inability to let go the power in one's hand to those down the line. Rather than set targets, plan and organise curriculum revision, its transaction in the classroom and in-service training of teachers at the macro level, it suggests that micro-planning and implementation be done through a cluster of educational institutions and support agencies coming together in an organised and legal form as an Educational Complex. Accountability will then shift to the Complex.

Has the school mainly the function to mirror society or has the school a key role to play in fashioning the character and personality of the students? There are evidences to prove both. The study of Ten Good Schools by Her Majesty's Inspectorate (1977) revealed that the ethos, spirit, and characteristics of these schools as social institutions formed the focus and highlighted the key role of the head. It observed, "The strengths derive above all from the professional skills of the head and staff in creating well-ordered environment in which learning of all kinds can flourish, within which levels of expectation are at once realistic and demanding, whether in academic performance or in social behaviour; and where functions and responsibilities are clearly defined and accepted."

There would seem to be no real way of finding solutions to equity and efficiency, unless the prolonged holiday that so many, involved in education, at different levels, seem to be having, is put an end to. It is true that this kind of school-level discipline cannot operate in isolation, but must be linked to discipline in other sectors as well. But if the present level of indiscipline continues, we will surely become 'A Nation At Risk'.

The economic value of education has been studied and a real co-relation established between investment in education and economic returns (Psacharopoulos, 1972).

Where is the hitch then? Why do we continue to fail, and have such a gap between well-designed plans and very poor level of implementation?

> Behind every failure of this kind there lies, in my experience, an inability to realise that change in the quality of classroom practice is a matter of growth—a living, inward change in the minds of individuals, which is not brought about solely by manipulating external influences such as laws, official syllabuses, instructions, sanctions, or even money. There seem to be certain laws of growth: certain factors stimulate it, others inhibit it. When educational planners fail to recognise these laws, two kinds of miscalculations result.
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> *Planners who have not had extensive experience in educational administration rarely understand how difficult it is for teachers to change their classroom practice. They seldom know the type of in-service training that is necessary to help average and below-average teachers make even limited changes. This frequently means that the gap between an old syllabus and a new one is too wide for many teachers to bridge.

*Partly as a consequence of this and partly as a result of failing to understand the history of educational change in older countries, planners grossly underestimate the time it takes to bring about real change in classroom practice (C E Beeby 1986)

The planners will require good research data base as well as information from the ground level on which to make recommendations for change. Hence any kind of realistic planning has to include the school, the community, the parents, the teachers and the Heads, along with professional organisations and agencies at the national/state level But with all other factors, we must include the ultimate critical factor of political commitment

Some Reflections

Limited experience has shown that the community is willing to back up the efforts of government/non-governmental agencies when they perceive that the service given is relevant. Cost has often been a major stumbling block to both quantitative and qualitative expansion. If a more participative form of management is at least given a fair trial, including responsible participation of the teaching community, the cost factor need not become so forbidding. The enormous creative talents of the teaching community have not really been given a serious and sustained chance for expression

The role definition of the NCERT will also need a review, by making it a much more used national educational resource, a major agency for research into specific educational conditions and aspects of the curriculum and development of exemplar materials and an institution for training the trainers, apart from its advisory role to the Government for policy evolution, at the various state and regional levels. It should have a higher role and a more demanding role than this, namely to provide leadership, though model-building, facilitation and support, and create a synergic alliance of the huge national teacher resource for expanding quality, in efficient and effective ways, without overlooking the equally urgent demands of equity.

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Qualitative Expansion of Secondary Education

A. SUKUMARAN NAIR

EDUCATION in post-independent India has been criticised for certain major inadequacies, the most important of which is its emphasis on quantitative expansion of the system at the cost of quality. Our major concern in developing the education system since independence has been to increase the reach of education and make it available to all. Our excessive concern for expanding the size of the system can be justified to some extent in view of the fact that large sections of the people in the country did not have any exposure to education at all. However, indiscriminate expansion of the system ignoring the claims of quality led to a steady deterioration of educational standards at all levels. When we decided to channelise our scarce resources for the quantitative expansion of the system, we overlooked the possibility that such a step would ultimately negate even the small initial gains that we made through quantitative expansion. Expansion of the education system is not an end in itself, but the means to an end—that of transforming our traditional society into a modern one. Education in all democratic societies is practised as the major instrument of social change, and as a means of translating national goals and aspirations into social realities. For this to happen, it is essential that the education provided should be of appropriate quality. Educational developments in India in the course of the past forty-four years belies the assumption that it can bring about the desired changes in our social functioning, and hence needs to be radically restructured. It is high time that we make a critical analysis of the system, so as to identify its drawbacks and develop suitable guidelines for restructuring the system to enable it to perform the functions expected of it.

Quest for Quality in Indian Education

Any external observer of the development of Indian education in the post-independent period would end up with an impression that our policy-makers were not very much aware of the importance of quality. But the reports of the different

Commissions, which studied the working of the system, show a surprising insight into the need for improving the quality of education. The futility of developing a system without quality is amply highlighted by the various Commissions—the Secondary Education Commission (1952-53), the Education Commission (1964-66) and the National Policy on Education (1986). The words of caution by the Education Commission (1964-66) that "the naive belief that all education is necessarily good, both for the individual and society, and that it will lead to progress can be harmful as it is misplaced", have not been taken seriously by the bureaucrats in the system. The report proceeds to spell out the nature of the education that will ensure the desired forms of national development. In the words of the Commission: "The direct link between education, national development and prosperity which we have emphasised and in which we deeply believe, exists only where the national system is properly organised, from both qualitative and quantitative points of view." The Commission suggested that we have to completely transform the content and process of education if it has to deliver the goods expected of it.

Transforming the Content and Process of Education

What are the major ingredients of a quality-based system of secondary education?

We will examine the concept of quality in relation to secondary education, against the background of the recommendations made by the expert commissions and committees. The different reports give many practical suggestions for making the system perform its expected function— that of producing human beings with the necessary knowledge and skills which will enable them to perform ideally and optimally in all sectors of life. What type of education do we require to develop the human beings of the kind described above? What are the bottlenecks in the system that stand in the way of performing its expected functions? This would require that we identify the inadequacies of the present system, remove such inadequacies and evolve new strategies and approaches to make the system functional.

Breaking Resistance to Change

The important shortcomings of the system of secondary education in the country have been highlighted in the reports of the different Commissions. But before entering into a discussion on the specific suggestions, there is an urgent need to consider a more basic factor that has stood in the way of reforming the system—resistance of the system to institutional change. Opposing changes in all forms has been the bane of our system. It has shown a remarkable ability to resist reforms in any form. It is possibly because of this that the Commission thought it necessary to devote one full section of its recommendations to stress the need for vigorous and sustained implementation of the reforms. The Government of India Resolution which preceded the appointment of this Commission, admits our failure in implementing the needed reforms in the statement that "a wide and distressing gulf continues to persist between thought and action and programmes concerning the quality of education, even when those were well- conceived and generally agreed to."

There have been some ineffective attempts, in the past, to implement some of the major recommendations. But this was not done with sufficient political will or sincerity. Hence many of these reforms were implemented only at the 'terminological' or 'ideational' level. Cosmetic reforms of this kind, introduced from time to time, tended to give the system an appearance of modernity. But such reforms were not sufficient to make any appreciable changes in the quality of education. The scenario of school teaching has continued to be as bleak as ever.

Shortfalls of the System

The present scenario of school teaching is one of lights and shades. But the shortfalls are so numerous that the strong points never get highlighted. A quick appraisal of some of the major drawbacks of the system has been attempted in the present paper.

Teaching of Mother Tongue

The modalities of teaching different subjects have not changed to accommodate new educational thinking. Look at the way we teach the most important subject of the curriculum—the mother tongue. The teaching of the mother tongue continues to be traditional. Modern developments and approaches in language teaching are unknown to most teachers. The Piagetian or the Gagnerian or the Chomskian approaches, which have revolutionised the nature and scope of language teaching, is yet to make any serious impact on the practice of language teaching in India. What is still worse is the fact that we have given up the ideal practices in traditional language teaching. Traditional language teaching, conceived in terms of developing the four-fold language abilities, heavy language drills and other related modalities, has been replaced by more ineffective techniques—verbalisation, explanations and interpretations. Developing specialised skills like reading comprehension or listening comprehension, or creative communication, are never stressed in teaching the mother tongue in most of our classrooms. The most basic language skill—pronunciation—has been a major casualty in language teaching at all levels. The subject-matter contained in the textbooks is usually dealt with at the information level. Little wonder that the language skills learned through such ineffective techniques are not sufficient to answer the needs of pupils for learning subjects like science or mathematics.

Teaching of Science and Mathematics

Teaching of mathematics and science in Indian schools follows a common pattern which is not very much different from the pattern used for teaching information-based subjects like history or social studies. The whole process is conceived as nothing more than information transfer. Scientific principles and mathematical theorems are presented in the verbal form, without giving the pupils an opportunity to internalise the meaning of what is presented. The modern educational concepts like self-experimentation and self activity which would help pupils to acquire knowledge first-hand, are not practised in most of the schools. The more comprehensive models followed in the advanced educational systems—process-based learning of science, for example—which involve steps like helping students to identify real problems in the area through first-hand observation, helping them to convert their observations into testable hypotheses and design experimental situations to test their validity, actual test against collected data, etc., have not yet percolated into the system. The curriculum experiments like those of the PSSC or the Chem-Study Group have made only an insignificant impact on our system. The science curricula in the schools of the country, by and large, are transacted through the conventional verbal modes of communication. The oft-repeated maxim of science education that "science is doing" still continues to be an elusive ideal. The same verbal methods are followed, with small variations, in teaching mathematics. Traditional curricula in mathematics are paraded in the name of modern mathematics. Modern mathematics topics are taught without a full understanding of their implications. The fact that modern mathematics as a movement was introduced to correct the old notion of equating mathematics teaching with number-based drills and problem-solving is not known to many of our curriculum framers and teachers. The concept that mathematics has to be developed as a typical deductive science which can accommodate within its broad logical framework, a wide variety of novel elements other than numbers (e.g., sets, matrices, vectors, etc.) and a wide variety of new operations (e.g., rotations, enlargements, translations and old operations like addition and multiplication given extended meanings), is yet to make an impact on our educational thinking.

Teaching of Social Studies

Teaching of social studies and humanities follows an almost parallel course. Modern assumptions in teaching of history—like achieving the goals of social reconstruction, or developing a better attitude towards the democratic institutions and process—have not influenced the thinking of our teachers. How many of our social studies teachers have really assimilated the concept of integrated teaching of different social science subjects, or the distinction between 'social studies' and 'social science'? The whole teaching-learning process in our schools ultimately degenerates into a cheap exercise in information mongering.

Half-hearted Operations of Co-curricular Areas

Indian education has, by and large, assigned an unimportant place for co-curricular activities. Co-curricular activities are seldom given the importance that they deserve in achieving balanced development of individuals. How many schools in the country will be willing to practise dramatics or music or painting or craftwork as part of the main curriculum operations? How many of our schools believe in the educational potential of physical education or work-experience? The fate of some of the ambitious programmes launched by the country under capturing labels like 'work-centred education' or 'socially useful productive work' will convince one of the fact that our teaching community does not believe in such 'fads' All such programmes died a natural death in the hands of teachers who equated education with verbalisation in the so-called 'serious' school subjects.

Failure to Induct Modern Practices

The methodology used by teachers (if the loose framework of instructional operations would qualify for the status of a methodology) is based on the time-worn concepts of teaching and learning. The vestiges of what was taught as 'general methods of teaching' in training colleges during the first few decades of the present century, still pervade the teaching scene in our schools Modern instructional strategies centred round the latest scientific principles of learning, and developments in educational technology which have now become popular in the advanced educational systems of the world, have not been accepted by a vast majority of our teachers. It is known that some of the modern models of instruction and the technological supports used for presenting these models can augment the efficiency of the teaching-learning process several-fold. The popular curriculum experiments in different school subjects (e g SMP, Nuffield Science, Integrated Maths-Science, etc.) need to be studied for their adaptability to Indian conditions Modern concepts like learning treated as behaviour modification, designing technology-based learning strategies, designing the curriculum for specific subjects, using the latest pedagogic principles, more extended use of technological software and hard-ware, etc., still remain a distant dream for the school system in India.

Defective Methods of Evaluating Educational Outcomes

Evaluating the outcomes of education is yet another grey area in the system The traditional methods of testing and examination still pervade the scene Only marginal reforms are introduced from time to time Modern approach to evaluation based on the redefinition of outcomes in terms of theoretically classified behaviours (e.g., Taxonomy of Educational Outcomes) is yet to get complete acceptance in the hands of our teachers Evaluating process outcomes (especially in science), the concept of formative evaluation and other modern developments have not been integrated into our educational practice. Some of the modern techniques like normative interpretation of examination scores, grading, recording educational growth in cumulative records, etc , are not known to most teachers, not to speak of more specialised techniques like maintaining developmental profiles of individual students, diagnosis of learning difficulties and remedial teaching, compensatory educational programmes for those with cultural handicaps, etc The common support services like educational and vocational guidance, counselling, etc. are almost non-existent.

Lack of Encouragement to Innovative Practices

The education system in the country is one which has never encouraged or even tolerated any originality or innovation. Because of its rigidity, even the small number of innovative teachers in the system shy away from attempting anything new Teachers who understand the value of educational research are few. The very small number of teachers who engage in research do so only for improving their academic credentials, they are seldom motivated by the zeal to solve the 'real' problems they face in their professional performance. Action research which is very popular among practising teachers in the educationally advanced countries (practised as a method of improving their performance) has not become popular in the country

Non-acceptance of Scientific Management Models

The administration and management of the school system is another major area of our educational operations which needs to be revolutionised. The outmoded bureaucratic and hierarchic models (long discontinued in all advanced educational systems) still pervade the system Hierarchy-based inspection and supervision practices need to be replaced by modern practices like participatory supervision, and decentralised democratic administrative practices. Scientific planning of education is also not very much in evidence Professional management of education remains to be accepted as a day-to-day practice in education. Traditional curricula, conventional teaching methods, and out-dated management practices characterize the system

Lack of Faith in Scientific Practices

The foregoing observations have not been made to suggest that our system of school education is totally ignorant of modern trends and practices. In fact, there have been concerted efforts by the national agencies like the NCERT, the NIEPA, Universities, State Institutes of Education and SCERT's to acquaint the teachers and educational systems with new practices and new thinking on education. But except in the case of a few very committed institutions, these new practices have not been put into practice Even when certain reforms are accepted and introduced with state patronage (e.g. work centred education, socially useful productive work), they are practised in such a way that the teaching community and the general public soon lose their faith in the reforms.

Parameters of Quality Improvement

If we analyse the recommendations of the different Commissions, starting with the Secondary Education Commission (1952-53), to the latest, viz. the National Policy on Education (1986) and the Report of the Ramamurti Committee, we come across a number of important ideas for improving the quality of school education in the country. Examples of such suggestions are the use of dynamic methods of teaching, giving a vocational bias to the school curriculum, diversification of courses, promotion of national consciousness through education, developing a common school system for the country, relating education to life through appropriate forms of work-experience, improving the quality of teachers and teacher training, developing flexibility and dynamism in the administrative structure, developing democratic values conceiving education as human resource development, science-based restructuring of society, etc., to cite only a few. Not many of these recommendations have been implemented in any systematic manner, despite the fact that most of these are valid for all educational systems for all times.

The suggestions for qualitative improvement of secondary education in the country need to be evolved against the background of the recommendations of the earlier Commissions and considering the realities of the educational set up of the country at present and also on the basis of some of the modern developments in educational theory and practice.

Operational Model of Secondary Education for India

An integrated and holistic approach of the kind discussed above would help us to develop an operational model which would ensure an acceptable level of quality in the system. We have to reconceptulise or revisualise the system in terms of the major considerations discussed above, and develop a model which would answer the current demands of quality education.

We may define the broad parameters of quality in secondary education in terms of the following operational instrumentalities:

(a) the expected behaviour changes to be effected through education are spelt out in all detail so as to be intelligible to all those who are connected with the operation of the system,

(b) a curriculum, which when transacted will produce the expected behaviour changes, and is designed using accepted educational principles and practices,

(c) a full range of instructional strategies (together with the total technological support) are identified for curriculum transaction,

(d) the ideal models of evaluation are worked out and used to decide whether all the expected behaviour changes have been achieved by all the pupils in the target groups, and

(e) scientifically designed management systems are used to ensure that the social goals set for the system are attained

Some practical suggestions for reforming the system have been worked out, keeping in view the above operational model as a broad framework for action

Suggestions for Restructuring the System

Some of the [illegible] suggestions for restructuring the system (worked out on the basis of the above model) are presented below.

(i) *National Curriculum Policy for Secondary Education*

One of the most important drawbacks in the operation of the system of school education in the country is that we have failed to evolve and implement a national policy on education Doubtless, we had several national policy formulations of a recommendatory nature, on the modalities to be adopted for reforming the system But we have never attempted to conceive the system in the whole country as a single entity and operate it as a single entity. The 'recommendatory' reforms suggested were either not accepted by the states or were not implemented properly. The absence of a single agency in the country to oversee the implementation operations resulted in the distorted implementation of the suggestions. It is necessary that there should be a single agency which will have the constitutional and administrative authority to implement the reforms which are nationally accepted, and oversee the implementation operations at different levels. It will only be proper that the Ministry of Human Resource Development be given the authority and the responsibility for implementing the national policy relating to secondary education The necessary constitutional amendments may be enacted to give full authority to the MHRD to perform this task. The MHRD may authorise a national agency like the NCERT as the implementation agency in this regard. The Ministry may delegate some of its powers to the NCERT and the SIEs or the SCERTs. The central agency should develop a single curriculum for Standards IX to XII (with adequate flexibility to include content areas relevant to the needs of individual states) and 'oversee' its operation for a minimum period of 10 years to start with. The authority for running the secondary school stage of education may be handed back to the state after this period, if necessary A unified examination scheme has to be accepted all over the country— the Indian Secondary Examination (ISE) at the end of Standard X and the Indian Higher Secondary Examination (IHSE) at the end of Standard XII The modalities should be evolved by the MHRD in consultation with the states and on the model laid down by the NPE The examinations should be conceived in such a way as to maintain the highest standards and international comparability, and also to fit in with our national requirements. The system itself should have sufficient flexibility to adapt itself to differing system requirements and individual learning needs. The certificates should be accepted as the only recognised qualification for entry into higher education and recruitment to jobs all over the country.

The new national system will prescribe its own curriculum, textbooks and examination and also develop and disseminate scientific information concerning the instructional strategies to be adopted. Quality materials - textbooks, teachers' handbooks, pupils' workbooks, supplementary readers, audio video supported instructional packages, question banks, diagnostic-remedial packages, etc. - should also be developed on a large scale and made available to all the schools of the country as a part of the new national curriculum policy. National certification will help to standardise and control the quality of educational operations in the country. The adoption of such a system will also be of immense help in achieving the more important goal - that of national integration.

(ii) *Operational Strategies for Implementing the National Curriculum Policy*

The new policy which we may be labelled as the National Curriculum Policy (NCP) will have to be operationally defined in terms of the scheme of examination, medium of instruction, instructional strategies, level of achievement expected, etc. Such specifications will help to keep the standards at the highest possible level. The level should be periodically reviewed. The NCERT may be given this responsibility and also the responsibility to develop the instructional materials, support materials, and feed-back mechanisms for the operation of the national curriculum.

The new system should define expected quality in precise terms, in terms of curricular content, operationally defined behavioural outcomes, question banks, ideal instructional strategies and materials, diagnostic-remedial approaches to be adopted, norms to be reached, etc. The use of scientifically designed instructional approaches would help to professionalise educational operations. The system should also use professional methods for working the system; research-based decision-making, adoption of modern instructional strategies and technological accessories, etc. Scientifically developed instructional packages should be used for dealing with the talented, gifted and creative children, slow learners, culturally disadvantaged and other such groups requiring special instructional treatment. Materials for self-learning should be developed and popularised.

Evaluation should be comprehensive enough to include all the expected outcomes. It should also be designed in such a manner as to assess progressively the higher-level outcomes like analysis or synthesis of Bloom's Taxonomy, dimensions of logical and critical thinking, dimensions of creative thinking like fluency, originality, etc. Model test items should be placed within the reach of all the teachers. The test items would serve as an indirect definition of expected standards and quality of performance The model items should cover the unusual areas like affective and psychomotor outcomes, process-based outcomes, etc.

(iii) *Integration of Curricular and Co-curricular areas*

An important limitation in our present thinking on the school curriculum is that we are unwilling to treat co-curricular areas as part of the curriculum The irrational distinction between curricular and co-curricular areas has resulted in the exclusion of many co-curricular areas with strong educational potential, in favour of the conventional areas Co-curricular areas, when imaginatively used, can act as effective supports for curricular learning The educational potential of dramatics in learning of history or literature, or of science club activities in science learning, is not often fully explored by the system. Many of the affective and psychomotor skills are better acquired in co-curricular learning situations.

A large number of co-curricular activities like painting, music, drawing, dancing, dramatics, science clubs, physical education and yoga, etc should be treated as part of the formal learning system to be provided by the schools. These subjects should be taught by qualified teachers and supervised by specialists appointed by district-level agencies controlling education. Youth festivals and inter-school competitions in such areas will help to boost the importance of these areas, and get them integrated with the main curricular areas

(iv) *Mother Tongue as the Medium of Instruction*

An important factor that is critical in deciding the quality of education is the medium of instruction adopted by the system The superiority of the mother tongue as the vehicle of communication is rather well-accepted. Mother-tongue is the natural vehicle for thinking, comprehending and communicating with others Even without any rigorous training, every child will have a minimum repertoire of language skills in the mother tongue which will help him to assimilate anything presented in that language. Use of other languages like English or Hindi (for non-Hindi-speaking areas) would make learning more difficult. Also it is very unusual that we get a teacher who has achieved the required competence in the other language used for instruction. Consider the case of English-medium schools which are very popular in the country Even granting that the teacher with all the skills in English language is available, he has to address a group of students who do not possess all these skills Much of the subtle meanings and complex concepts to be conveyed in subject areas like science or mathematics is not fully conveyed to the students This results in a partial or even a distorted understanding of what is conveyed The cumulative effect of such learning deficiencies would ultimately become visible as low standards of attainment in the subjects learned The low quality of original research in the country could often be traced back to the low attainment of students in English language, the medium of instruction in higher education

The medium should be compulsorily made the mother tongue for all students at least up to Standard VII Any deviation from this rule should be permitted only in very exceptional cases But English can be retained as a common subject for all. The switching on to English or any other medium may be permitted in exceptional cases (on the basis of a test) for those who want to change the medium in Standard VIII. But the medium of instruction at the higher secondary stage (Standards XI and XII) may be English or the mother tongue or any other appropriate language in-use. The use of the mother tongue as the medium of instruction requires that quality textbooks, supplementary books and additional library reading materials are developed for the purpose in all major Indian languages. A three-year time-limit may be set for this transition and for the preparation of basic materials, reference books, etc

(v) *Watching Individual Growth and Development*

The present practice of treating the classroom as the unit of teaching and ignoring the needs of the individual learner has done much harm to the quality of education. The ideal practice is to watch every learner separately, and make an assessment of his progress in every major area of human development, and applying corrections wherever needed. The individual learner has to be helped to learn at a rate consistent with his abilities and disposition. The rise of modern technologies of education makes it possible to individualise teaching-learning situations much more than was possible in the conventional classrooms. All schools should be encouraged to maintain a 'development record' or 'growth profile' of all their pupils and use this as a base for designing individualized learning situations, available in the form of learning packages, programmed and computer-assisted learning materials, etc A cumulative record of the growth of the individual in respect of all educationally significant dimensions is to be maintained by the teachers A total growth record of this kind would keep the teacher on the alert about the individual's learning needs and gaps. In the face of this information, the teacher will be better motivated to provide remedial instruction to close the learning gaps detected All aspects of growth (physical and health data, psychological, social, environmental and educational data, biographical data, etc.) get recorded on this growth profile The teachers will have to be specially trained to develop expertise to perform this task with sufficient degree of objectivity. The profile would be of great help in correcting educational inadequacies, behavioural disorders, and assisting the individual student in the choice of optional subjects, vocations, etc.

(vi) *Specifying a Minimum Learning Continuum*

The system of recording the growth of individual pupils can be made more meaningful if together with the achievement in each subject, there is provision for recording the development of minimum learning skills expected in a subject at each educational level Formative evaluation concepts of Bloom and his associates, and the Minimum Learning Continuum model popularised by the NCERT, can be used for following the educational growth of individual pupils. The non-detention policy followed in some of the state systems in the country, however attractive it would appear in theory, has done the greatest harm to the quality education The adoption of such short-sighted policies has freed teachers from all obligations to show concrete results. Promotion from one class to another should be on the basis of minimum essential testing at each level. All the basic skills expected of students at a particular stage can be specified and all students should be enabled to achieve all these skills as minimum evidence of learning. The system should be made accountable for its performance.

(vii) *Bridging the Gap between the School and the Community*

The ever-increasing distance between the school and the community often affects the proper functioning of educational institutions, and has contributed to the declining of the quality of education. All enlightened educational systems have accepted the need to bring the school and the community into close partnership They have devised in-built mechanisms for 'bringing the community into the school' and for 'taking the school out to the community' The interlinking of the school and the community can be of help in improving the quality of education in two ways: the community keeps a close vigilance over what is happening in the school; the community steps into the school when it needs help Forming 'parent-teacher' or 'parent-teacher-student' associations is one of the most popular methods of securing the desired community-school interlinkage Educated people in the community under this system, help in teaching, performing extra-educational functions of the school (e.g. library organisation), and in running the co-curricular programmes Schools can involve the parents in organising school-day celebrations and other functions, rural exhibitions and fairs, school beautification programmes and a number of similar activities. Students can be taken to the community for social service and developmental activities, conduct of community surveys, etc The formation of Local Education Authorities like those in existence in the USA or the UK, would ensure that community leaders actively participate in guiding and directing school activities. The community leaders, under this system, understand and watch the problems of the school and involve themselves in solving the school problems.

(viii) *Defining and Acquiring Minimal Facilities for Schools*

The designing of a total structure of the kind indicated above would require some minimal school facilities in the form of buildings, laboratories, libraries, playgrounds, theatres, gymnasia, workshops, audio-visual centres, sanitary facilities and a range of essential equipments like the radio, audio recorder, video recorder, personal computers, sports materials, laboratory equipments, workshop tools, agricultural implements, etc Each school should (with state and community assistance) attempt to develop these minimum facilities on the basis of a time-bound plan. The national policy frame should also specify the minimum requirements for a secondary school of average size, as also the number of teaching and non-teaching personnel required for running the system. A time-bound programme has to be set in motion A five-year period may be set for the purpose. The State Directorates should be made responsible for effecting this change. We may also have to think of a plan for raising at least part of the funds needed for the improvements from the community. The states may also think of raising a special education cess for raising the needed funds There should be a strong attempt to mobilise the resources from the community (wherever possible) and the community leaders and the parent-teacher associations may be made responsible for raising necessary funds Yet another possibility for raising funds for the purpose is to create a development fund by collecting small deposits from students. Students who can afford may be persuaded to pay amounts varying from say Rs 100/- to Rs 1000/-, to be collected at the time of admission, on condition that it will be returned at the time of their leaving the school This fund can be used for improving school facilities, school beautification schemes and other such developmental activities.

(ix) *Scientific Decision-making and Management of Education*

Decision-making in the field of secondary education needs to be professionalised and placed on a scientific footing We have to replace subjective decision-making in the system, by scientific methods. All decisions in the field have to be taken by professionally qualified educational experts. This would also imply the training of a large number of educational managers who have the competence to take research-based decisions on all important problems facing the system In fact, every aspect of the functioning of the system—curriculum development, textbook preparation, instructional supervision, evaluation, administrative decisions, organisational changes, etc. will have to be managed by trained professionals in the field. We should develop a cadre of specialists in each of the sub-disciplines of education and place them in critical positions before introducing the reforms. We require curriculum and evaluation specialists in various subjects, specialists in textbook preparation, specialists in school administrations and supervision and a host of other specialists, if we have to run the system on the lines suggested above We also need trained educational technologists who can develop the needed educational software and learning packages, and also assist the system to acquire the appropriate technological hardware and put them to use.

(x) *Better Strategies for Teacher Preparation and Teacher Improvement*

The quality of teachers in a system of education is possibly the most crucial determinant of its quality. We have to ensure that only the right type of people enter the field of teaching, at least in the future. Also, we have to see that those who have entered the system be enabled to improve their teaching skills and competencies through appropriate in-service programmes The quality of pre-service teaching programmes has also to be improved The pre-service preparation of teachers in India is very weak and needs to be vitalised in many ways The present one-year B Ed course is too short a period to effect lasting impact on the trainees The fact that this is the shortest professional programme in existence in the country should force teacher-educators to take a second lo at the programme For most of the other professional courses, the period varies from 3-5 years or even more. Instruction in the essential theoretical knowledge and the practice of teaching together needs a minimum of two years' preparation It is seen that teachers coming out of the integrated five-year B A /B.Ed. or B.Sc /B.Ed programmes turn out to be better teachers than those coming out of the conventional teacher-training colleges The duration of the pre-service training programmes should be of two years The course may be redesigned as a master's, programme (like M.Ed , Secondary Education) or more specialised courses like M.S Ed (Master of Science Education), M.L.Ed. (Master of Language Education), etc The training programmes should be conceived to develop the basic pedagogic skills and subject-matter competencies to teach the classes from Standards IX to XII The selection for the new two-year courses should be on the basis of a written test, a National Selection Test for Teachers (conducted either by the NCERT or the UGC), followed by a practical test in teaching.

In-service training for teachers also needs special attention. Focused in-service programmes will have to be organised by the SIEs and the SCERTs on a planned basis, to meet the requirements of the national curriculum and the national objectives. The needed in-service programmes can be covered through the distance education methods, with the help of the IGNOU or other universities which are willing to take up this responsibility. The adoption of the new mode of in-service training will not only cut down the costs of training, but will also increase its quality and reach. The practical aspects relating to teacher skills can be covered using audio and video recorded materials Such materials illustrating teaching skills, teaching techniques, etc. may be made available to the schools direct or through mobile units Every teacher should be expected to take at least one certificate course of this kind (each of three months' duration). Completion of three such courses should entitle a teacher for receiving an Advanced Diploma in Education (A.Dip.Ed) Completion of one certificate course should be made a pre-condition for the sanctioning of increments to teachers. The completion of an Advanced Diploma in Education should entitle a teacher for three increments The Directorate of Education should meet the expenses for the in-service courses.

The pre-service courses in teacher education should cover modern developments in the psychology of education, educational evaluation, instructional models, educational technology, remedial teaching, educational administration and management, and action research, as well as new instructional strategies in different school subjects. Teacher recruitment should also be remodelled on the basis of more defensible techniques. Teacher aptitude tests, practical demonstration of teaching, etc., should be used for future teacher recruitments, in addition to their performance in teacher education courses

(xi) *Other Major Reforms Needed*

There are many more urgent things on which action is needed for effecting qualitative improvement of secondary education. In fact, it is difficult or impossible to cover all of them. But some of the more important aspects which need attention as a part of quality improvement, are briefly listed below

- developing curricular models and audio-video supported instructional packages for promoting national integration;
- integrating work-experience and vocationalisation in the general curriculum;
- ensuring accountability for professional performance of teachers through suitable forms of community assessment;
- rewarding superior teaching performance and innovations through fellowships, and direct selection to higher positions in the system,
- devising scientific methods for teacher promotions and recruitment;
- designing suitable training programmes for educational managers and academic supervisors,
- reforming the scheme of school examinations and certification methods by combining internal and external examination marks, use of grading, and recording the total growth profiles.

Conclusion

The foregoing discussion is intended to focus our attention on some of the more important aspects of secondary education which need urgent reform and restructuring, if we want to develop a secondary education system which will be able to face the national challenges. The phenomenal increase which we have achieved in school education in post-independent India will not be of much use to the country unless it is followed up by a systematic policy for quality improvement. The suggestions presented above are by no means exhaustive. The reforms suggested here are those which appear to be more critical than others in effecting a total change The paper is intended to provoke more critical thinking about our current practices and encourage our decision-makers to use modern pedagogic principles for evolving better operational strategies and organisational models.

Qualitative Expansion of Secondary Education

D B DESAI

THE past is invariably related with the present In fact, the present is because of our actions in the past and hence, the future will be dependent upon our present thinking, perceiving, planning and actions.

The main aim of this paper is to project the future trends in secondary education and critically examine the present strategies with a view to suggesting suitable changes for future

A look at the past will be helpful to understand the present position of secondary education.

Critical Assessment of Developments in Secondary Education

Secondary education, which was once considered to be the "Weakest Link in Indian Education" by the Secondary Education Commission, 1952-53, is now in crisis There are four distinct periods in the history of Indian education

a ancient and medieval period,
b. British period,
c post-independence period I (1947-66),
d. post-independence period II (1966-1991).

About the first period, it will be enough to say that education in some indigenous way existed in India for thousands of years and India was the leader in ancient times in the field of education

The Britishers wanted to get the help of Indians in running the Government, which seems to be the main thrust of education during their rule. A great landmark in the history of Indian education , the Woods Despatch of 1854, considered how useful and practical knowledge suited to every station of life might be best conveyed to the great mass of the people who were utterly incapable of obtaining any education worth the name by their unaided efforts

The Hunter Commission, 1882 recommended that the Government should take the entire responsibility of primary education, leaving secondary education to private enterprise.

From 1905-1917 was the period of rise of nationalism in our country and the movement for mother-tongue as the medium of instruction started During the period 1917 to 1947 there were four major reports·

1. Calcutta University Commission Report—1919.
2. Hartog Committee Report—1929.
3. Abbot-Wood Report—1937.
4. Sargent Report—1944.

The main thrusts of these reports were·

a Starting of intermediate colleges,
b. Diversification of curricula leading to commercial careers,
c. Starting of a hierarchy of vocational institutions,
d. Branching of schools into two categories: Academic and Technical.

This period witnessed enormous expansion in secondary schools. In 1916-17 the total number of secondary schools was 4883 in the country, which rose to 12693 in the year 1947-48 and the total number of pupils was 924770 in 1916-17 which rose to 2953,995 in 1947-48.

After Independence four bodies examined secondary education: Tarachand Committee—1948; University Education Commission—1948-49, Secondary Education Commission—1952-53, and Education Commission—1964-66. The Tarachand Committee suggested opening of multipurpose schools. The University Education Commission suggested twelve years of study at school including intermediate college, whereas the Secondary Education Commission suggested 8+3+3 system of education and diversification of courses and reform in examination system. The Education Commission 1964-66 suggested higher secondary stage of 2 years, equalisation of opportunities and strengthening of multipurpose schools. This period witnessed rise in number of high/higher secondary schools from 7288 (1950-51) to 35773 (1970-71) and multipurpose schools nil in 1950-51 to 255 in 1955-56 to 2625 in 1970-71. The percentage of school-going population also rose from 5.3 to 20.4 during the period 1950-51 to 1970-71 The results of matriculation examination between 1951-52 and 1965-66 ranged from 42 to 48.5 per cent. It means that in no year was the result 50 per cent or above. The following trends have emerged in secondary education during the past few decades

1. A trend of academic schools to multipurpose schools with vocational streams.
2 Diversification of curricula
3. Reforms in examinations.
4 Change of structure from 8+3+3 to 10+2+3 and consequent emergence of Higher Secondary Schools.

If we think of the effect of historical development on Indian psyche, we can very well observe that at the beginning of the 20th century education was considered to be a *luxury* and most of the parents were *not ready to send* their daughters to schools and even in case of boys it was not expected to send them to schools in 80 per cent of families During the 1950s the picture became totally positive wherein education was valued, and the last decade of the 20th century education is considered to be a "Prize Possession" and scenes of big crowds in the compounds of schools for admission, are a common sight for anyone to see in any part of India. It means that education has become not only a value but also an aspiration. The country is experiencing not only knowledge explosion but also 'aspiration explosion'

Various Dimensions of the Present Position

In pursuance of the recommendation of the Education Commission—1964-66, the country embarked on a new pattern of education, that is, 10+2+3. All the states have implemented this pattern. The major thrust of this pattern was to bring uniformity in the structure of Indian Education—and also the vocationalisation of education to avoid the blind rush towards higher education. The implementation of the scheme of vocationalisation of education lacked the following.

1. defined infrastructure and salary schedules for technical teachers,
2 appropriate courses required in the local community,
3. laboratory and workshop facilities,
4 required manpower for specific vocational courses.

A study conducted by CASE, Buroda on the state of vocationalisation, in the state of Maharashtra, Karnataka and Gujarat, makes the following observations

a. Vocational education programme has quite a number of limitations/difficulties. Where machines and materials are available, men (personnel) are not available. Where personnel are available, workshop and other facilities are not available There are lacuna in infrastructure, e g , part-time jobs are not well-defined. Hence part-time teachers could not contribute wholeheartedly. Principals of vocational schools suggested that pre-service and in-service orientation should be made compulsory for vocational teachers.

b. The major sources of income of the vocational institutions were Government grants, contribution of the school management councils and students. The major heads of expenditure were teachers' salaries, capital investments, laboratory and library Among all the heads of expenditure the salaries for teaching staff claimed the major part of expenditure. With regard to finance of the vocational system, most of the principals stated that the grants provided by the State Governments were insufficient and therefore essential requirements could not be met. This matter should draw special attention of the authorities at the state levels

As the present institutions are mostly established in city/town areas and offer a limited number of courses with less utility for employment, students from rural areas with poor economic backgrounds and girls might not have been much motivated to join the vocational stream. In this regard, there is a need for establishment of vocational schools in rural areas, selection of job-oriented trades, provision of scholarships to students. Also in each region and school, proper steps must be taken for providing guidance facilities so that students who have the aptitude can be placed in appropriate vocations. At the entrance stage, every school should take initiative to ascertain the aptitude of the students

The second innovation of merit was: Work experience and Value-education The commission recommended the two subjects, which are of vital importance:

a. Work experience and social service,

b. Education in moral and spiritual values.

The term "work-experience" was then converted into "socially useful productive work" (SUPW) which the schools have not been able to adopt. It remained as a dream and it met with an unnatural death. "The mouth that eats, the hands must work", so believed Mahatmaji and the value of productive work can only be established through work-experience. Similarly the value of sympathy and empathy can only be generated through social service. This subject also does not find place in the curricula of secondary schools in most of the states.

Then, similarly the moral and spiritual values for which India is quite known, are missing in the curricula even after 24 years of the Education Commission's Report With regard to other subjects, we have to note from the reports of the State Governments that efforts to revise the curricula have taken place.

The failure rate in any state in Standard X or XII is around 50 per cent. Also the lowest marks required for passing are 35, which means a student not possessing 65 per cent of knowledge can also pass easily. This passing standard is lowest in India compared to other developing countries Even with this low passing standard, 50 per cent of students go back to schools with failure certificates (?) This wastage, if not called 'criminal', should be termed 'sinful'.

The aim as cited by the Education Commission (1964-66) of school education is to develop attitudes, skills for communication and appreciation of work as a value, whereas the final examinations are only paper-pencil tests, which measure only written communication but never oral communication of students. Hence the objectives are high but the examination system is inadequate and imperfect.

Examinations only measure rote memory of the students, ignoring other abilities and skills. Immediately after the Secondary Education Commission (1952-53) Report, in 1955, Prof Benjamin Bloom, expert in examination system, visited India and gave impetus to the movement for examination reform. As a result, the question papers of all State Boards of Examinations were improved

The Secondary Education Commission (1952-53) suggested reform in strategies of teaching under the title ‘Dynamic Methods of Teaching’ and it emphasized ‘Value of Activity Methods”

Similarly, the Education Commission (1964-66) emphasized (p 397) ‘techniques of re-vitalising classroom teaching’ The Commission said, “in the average schools today, instruction still conforms to a mechanical routine, continues to be dominated by the old besetting evil of verbalism and therefore remains as dull and uninspiring as before This means therefore that the characteristic of teaching through words only existed during the Secondary Education Commission (1952-53) report till up to the Education Commission (1964-66) Report and there is no change till today i.e. in the year 1991-92 and, that too, despite stupendous increase of teacher training institutions in the country. The words (p. 401) of the Education Commission (1964-66) that "when in doubt, teachers will teach in the way they were taught themselves and not in the way they were told to teach" have proved to be prophetic. So, if a school system is to become more flexible and teaching methods more lively and varied, it is essential that these qualities be established very early in the practice, as well as in the theory, of at least some of the teacher-training institutions.

A Critical Look at Innovations

After independence quite a number of innovations started Among them, the starting of the NCERT is indeed of paramount importance

Starting of the NCTE, vocationalisation of education, IGNOU, correspondence education, extension services for secondary school teachers, special education and Navodaya Vidyalayas are some other examples Let us look at these innovations in a comprehensive way

The NCERT was started with great expectations for giving leadership to the country in school education During the last 30 years the NCERT has done significantly in the following areas

a generating workshops and seminars for orientation of teachers through extension services,
b strengthening science and mathematics education programmes,
c helping vocationalisation of education programmes,
d. initiating examination reforms;
e supporting innovative teachers through seminar reading programmes,
f initiating and supporting researches in school education;
g improving curricula in school education,
h. producing nice, model textbooks for schools

Over the years the NCERT has made remarkable progress in terms of literature, research, orientation packages and has provided expertise to the countries like Libya, Iran, Nigeria, Iraq, Afghanistan, Sri Lanka, Nepal, etc.

The NCTE came into being with the purpose of strengthening teacher education programmes It has given a serious thought to the problem of improving teacher education programmes in the country. It is heartening that it is being given a statutory status to enable it to perform its functions more effectively.

The NCERT has helped orientation of teachers in vocationalisation and produced useful materials as an aid to teachers.

One of the remarkable innovations is open university in the model of Open University of England It is doing significant work by producing T.V. programmes and teaching through the mode of distance education.

Various Boards of Secondary Education have started providing correspondence education In other words, education has reached the masses.

The departments of extension services in about 98 training colleges of India were established in the year 1955-56 through Ford Foundation Assistance initially. In 35 years, these centres have done remarkable work in providing continuous orientation to teachers in different school subjects, techniques of teaching, etc. These programmes were consolidated by the DEPSE.

The NCERT in the last ten years has given support to special education programmes by providing new courses, teaching models, etc. Even the UNESCO has recognised the need for special education. This decade will be marked as a decade for work towards special education.

Navodaya Vidyalaya is the latest innovation started by the Ministry of HRD Only future will be able to tell about its success and contribution, as it is too early to comment on its functioning.

Looking at all these innovations one feels that the period from 1910 to 1947 was the period of *quantitative growth* whereas the post-independence period is the period of *qualitative improvement* along with quantitative expansion. One also feels that the teachers of present day, compared to the teachers of earlier days, are more aware about the happenings around, more curious to know the latest trends and more vigilant about their rights. There is a greater awakening among teacher-educators about their profession and obligations associated with it. The role of the NCERT and the Ministry of HRD in such an awakening is significant and noteworthy.

A Critical View of the Present Strategies Leading to Qualitative Expansion

The following aspects of secondary education require a critical look.

1. Curriculum of secondary schools.
2 Vocationalization of secondary education
3. Higher secondary school pattern.
4. Staff pattern and the incentive system.
5. Classroom ethos and teaching methods
6. Examinations and the resutls reflecting wastage and stagnation

1 *The School Curricula*

The school curricula need frequent revision because of "knowledge explosion". In fact, the word "curriculum" has come from the word 'CURRERE' which means "that which is flowing" In each state, if we look at the curriculum of one subject, say, geography or science, we shall find the difference not only in the "quantum" but also in the concepts. There must be common minimum curriculum prescribed by a central agency like the CABE which each state has to consider for formulating their curriculum.

The curriculum in each state should include stories, incidents and narratives which would promote *national integration* and which would generate a *national spirit* among the students.

Similarly, the curriculum should include activities for "work experience" and "social service", without which secondary education is incomplete As said earlier, the future citizen of India will need these two qualities in him or her Quality of useful productive work and quality of helping others through social service

The curriculum of each state should be revised, reanalysed and restructured keeping in view

- the total time available,
- the quantum of knowledge to be imparted,
- the nature of examinations,
- the variety of teaching techniques

By this, it is meant that teachers need not take the onus on themselves of covering the syllabus by "words" only but they may use the methods like assignment method which helps a student to learn by himself; they may also use more technology and aids, rather than only 'words' in the classrooms.

Curriculum means a pool of experiences to be provided to the pupils And, hence in many states if you ask for a curriculum, they will give you the "syllabus". Now curriculum is not synonymous with syllabus. Syllabus should describe (a) the aim, (b) the content, (c) the methods, (d) the assignments, (e) the references, (f) the home work, (g) the nature of examination. In most of the syllabi of different states, we find more emphasis on content description and minimal write-ups on the other features mentioned above.

2. *Vocationalization of Schools*

It is a noteworthy trend in secondary schools that they diversify the students towards technical subjects to enable them either to work after the 12th Standard or to go for higher level courses of technical education.

As stated earlier in our study of the Project Sponsored by the Planning Commission at CASE, M S. University, Baroda, the position of vocationalization of education is pitiably weak What are the reasons?

Firstly, the salary-cum-service structure is not worked out on definite lines in each state. An engineer who works as a teacher cannot be equated in salary with a general teacher. The technical engineer needs a separate salary structure When presently such a thing is not available, the machines in vocational schools lie locked up in godowns. We ourselves saw and observed the situation in vocational schools of Gujarat, Karnataka and Maharashtra Some schools managed part-time services of vocational subject teachers and conducted the courses on the basis of availability of specialised teachers rather than the needs of the area.

Secondly, there should be a separate Board of Vocational Education I have been a member of two such committees (the Committee on Vocational Education and the Committee on Vocational, special teachers) and I found that the role of such committees is only advisory but the role of the Central Board of Vocational Education (CBVE) can be very specific and direct.

3. *Higher Secondary School Pattern*

The nation embarked on a new pattern of 10+2+3 in line with the English system of education which is prevelant in most other countries The pattern was adopted in some states with greater enthusiasm whereas in some other states it was adopted very slowly But, it mus be said that such type of a uniform pattern has helped the trend of secondary education as now the transfer of a student from one state to the other is easy Also, the schools began to look at the centre for getting guidelines for formulating their curricula, this enhances uniformity.

4. *Staff Pattern and Incentive System*

A study on the salary scales of teachers of secondary schools showed that the teachers of Gujarat, Maharashtra and Delhi are decently paid but the salary structure of some states is still quite low. Even the pay scales suggested by the Education Commission (1966) are not implemented to this date in some states in India. This type of disparity disheartens the teachers.

Secondly, "once a teacher always a teacher" does not hold good in the teaching profession. As in colleges and universities there are cadres satisfying the growth of a lecturer In the same way, there should be cadres like: a teacher, a senior teacher, a supervisor, a guide, a counsellor and a model teacher

As a teacher goes on improving his techniques, improving his communication behaviour, improving his reading and preparation, he should be given incentives in terms of salary and designation

Do we not agree, that there are at least ten thousand sensible, extremely effective and scholarly teachers in India? What about them? Should they not be recognised, should they not be given higher incentives, should they not be given greater responsibilities?

On anticipation that a lecturer has to read a lot, we give them higher salaries and various incentives in cadres. Then why do we not anticipate that a secondary school teacher also needs to be quite up-to-date in his reading, preparation and teaching? If we agree to this, then a *thoroughly revised salary-cum-cadre structure* should be thought of by the centre in consultation with the states

There is a need for:

a. a guidance and counselling expert,
b. a physical education and yoga expert,
c. and a librarian in each school

Any survey study will reveal that schools do not have a counsellor Out of thousands of secondary schools, only a hundred may be having a counsellor The psychological help—if at all it is required—is required maximum by the children who are crossing boyhood or girlhood and are entering into *adolescence* and quite a number of them at the higher secondary stage who are crossing even the adolescence Unfortunately, no counselling service is available to them in schools This is a pathetic picture.

Similarly, any survey of school libraries will suggest that only one in a hundred schools may be maintaining the library well by purchase of new books and by motivating the students to read. Most of the schools do not have even a full-time librarian and a separate reading room!

The P.T. done in schools is many a time called a 'Pity-period' where the standard ten exercises which are done through generations—which I did, my sons did and my grandsons do today—are conducted. We should think of having weightage on "health, and yoga" for pupils at the secondary stage when the child is growing very fast. He requires good health—exercises, guidance Yoga will help in the cultivation of his body

If his *mind* is cultivated by various subjects, his *body* is cultivated by yoga and physical culture (as Bernarr McFaden used to call in his Journal "physical culture") and his *emotion* is shaped by proper counselling

I strongly feel the need of such specialist teachers in each school in the coming decade

5. *Classroom Climate, Teaching Methods and Pupil Motivation*

We conducted more than 25 theses on classroom climate and observed that in the classrooms having "cohesive and supportive" climate the pupils learnt a great deal (the teachers, the syllabus, the examination pattern remaining the same for all such classes) whereas the classrooms where the climate was "disruptive and aggressive," the pupils learnt very little.

What was the difference? The difference lay in the approach and methods followed by the teachers. The teachers of "cohesive climate" classrooms were sympathetic and motivating and used various methods of teaching whereas the teachers of "disruptive climate" classrooms were evasive, authoritarian and ill-prepared for teaching.

Extension Centres should be established in all the colleges of education. Then it should be seen that the centres become fully functioning. Each teacher—like this is made compulsory for lecturers with the innovation of Academic Staff Colleges—should be given one course in every five-year span to keep him abreast of recent trends in the techniques of teaching.

Our fifty doctoral studies on teacher behaviour led us to one conclusion It is this. "the teachers' indirect influence plays a significantly greater role in student-motivation than the teachers' direct influence"

Examinations and the Resultant Wastage and Stagnation

When a student comes to school, he does not come here to fail The doctors take the responsibility of curing the patients but huge wastage is evident from the SSC Examination results of the last 40 years The pass percentage of students revolves round 50 per cent in each state in India, which means that 50 per cent of students come back to us with failure. Where is our accountability? Why do we attribute the blame to others? The fault lies in the structure (teachers have least incentives in terms of promotions or increments), in the lack of infrastructure facilities of orientation courses for them and the lack of guidance and counselling services. Causes may be found in illiterate parenthood or weak foundation at the primary stage but we as functionaries of secondary education must accept the blame

Look at the school final examination in each state We measure the writing ability but never the oral communication ability. Orals have no place in the final examination whereas in life oral communication plays a significant role in all walks of life.

Also, a student requires only 35 marks to pass a subject Which means he can afford to be ignorant about 65 per cent of knowledge to pass the examinations

Do we not think that there is an acute need of establishing a National Board of Secondary Education which would look into all these issues to arrive at the "national minimum standard" in curriculum, examination, teacher training and all the related aspects.

Perspective for Further Development in the Next Ten Years

When we try to look into the future, we have to probe into the characteristics of next two decades and then we may try to see its implications for education On the basis of these we may suggest innovations, experiments and thrust areas

1. *Role of the Student*

What is the profile of a student in the secondary school? When he enters 8th grade, he is equipped with reading, writing and arithmetic but when he leaves 12th grade, it is assumed that he is equipped with competence for a vocation and for decision making as a voter Therefore, the schools have to cultivate the boy/the girl for the adulthood wherein the skill for a vocation and the ability between right and wrong, good and bad, desirable and undesirable will have to be cultivated Up to the 7th grade, basic skills and knowledge are "taught" to the student but now in the secondary and higher secondary schools we have to "facilitate" development of critical thinking and development of work-oriented skills. In other words, we have to retain the concept of teaching and consider the UNESCO definition of 1970, which says· "Learning is to Learn,How to Learn".

2. *Aspiration Explosion*

One can find, without any research the aspiration explosion in the community. In the year 1911, majority of the parents did not think it necessary to send their children to secondary school But now in the year 1990-91 parents are eager to send their children to schools and there are unending queues of parents and students at the doors of schools for admission The community also expects the boy or the girl to be able to work after his/her higher secondary school Not all the students can go to the college And, therefore, higher secondary schools and vocational schools must give at least job-orientation in various vocations When this has not happened, the disastrous result is unemployment of youth in our country Therefore education at the school stage should be not only content-dominated but should be such as would become "Light-giving and Fruit-bearing".

The second characteristic of the future decades will be knowledge explosion and the advent of new tools like computers, videos, floppy discs for learning The computers have revolutionised the whole method of storing knowledge and knowledge itself is growing at such a faster rate that we are not able to keep pace with it. Therefore, the aim of secondary education should not be to store knowledge in pupils' mind *but to cultivate his mind so that he learns how to learn.* In other words, we should help him to master the techniques, the methods and the media, so that he is able to gain knowledge in his own way. That is why the emphasis should be on method rather than matter and on 'process' rather than 'product' The present-day student is overburdened with overcrowded curriculum. Curriculum needs revision from the above viewpoint

In our country, unrest and riots occur because something is missing in education My assumption is that some input that is necessary for national integration in the curriculum, textbooks, teaching and media is missing If we have produced the students as envisaged in the Education Commission's Report, we would not have seen unrest anywhere Students' minds should be disciplined, trained and oriented towards *national feeling and national honour.* This could be very well done through *moral and value* education. *I strongly feel that yoga, value educaion, work experience and social service need to be introduced in schools.* The students should be able to make right choices. Wherever choice comes, value enters. The student who does 'yoga' has a more peaceful mind. Yoga inculcates peace and introspection These are important qualities for making choices The student should realise the dignity of work. Unfortunately the concept of work experience did not get roots in our schools. We should revive the concept and re-vitalise our efforts

Living for self should be extended to *living with* others and *living for others* This leads to the concept of social service. Co-curricular programmes for work experience and social service should be given due weightage in terms of time, space, finance and examination.

As Tofler says, 29 new products are produced every year Therefore humans feel the lure for possessing things. Erich Fromm calls it 'thing orientedness' He says the more a human being becomes thing oriented, the less he becomes idea-oriented. Bronowsky, who wrote the celebrated book *The Ascent of Man*, says that it is easy to live through imitation, through tradition, through impulse, through racial memory but it is difficult to live through thinking Humans live through these five aspects, but we have to orient the school students towards 'Thinking'

3 *Change in Methods*

This can be done only by revolutionising our methods and changing the furniture in our schools

To share an amusing anecdote with the readers, I was the chief guest at a function in one modern school housed in a huge new building. After the lecture, we were moving through the classes and I observed the benches with three holes at equal distance I asked the Principal why did these benches have the holes? The Principal said, "I don't know Only the carpenter can tell". We called the carpenter He said "I do not know the reason for the holes, only my father can tell". When we invited the father carpenter, he said "For 50 years I have been preparing the benches with holes but the reason only my grandfather can tell" When we invited the grandfather carpenter, he said, "Sir, there was a time when the students used to write in ink in the copy-book To keep the inkpot the holes were made in the benches" We said, "but there is no copy period now". The carpenter said, "Sir, we make benches by order. We are ordered to make benches as old benches". So I say the furniture of hotels has changed but in schools till today you find such benches?

Furniture should be in tune with the techniques which can be tried out if the furniture is flexible. In 1967, in a New York School, when I was fascinated to address one class, the students asked me—"which way" I did not understand The teacher explained to me, "the students want to know which technique you want to follow so that they can arrange themselves I said, "I want to have discussion" Immediately the students lifted their chairs and sat in a circle In our country, the benches were prepared by Britishers to produce clerks The basis of democratic discussion is sitting face-to face for interaction The day benches go from the schools, that day the arena of new techniques will be opened and the students will be cultivated in the process of thinking

4 *New Role of Teachers*

Keeping this in view one may ask What is the role of teachers in India? With the advent of T V., computer-assisted education, and videos the teacher need not teach (in J J. Rousseau's terminology) "through words, words, words and nothing but words" Hence, the role of a teacher would be as a Facilitator and Initiator in the process of learning

Let me adopt a new terminology for teachers A teacher is like a water tank in a society So high and so full with water that the water reaches the last tap with equal force

This necessitates, therefore, a new role of the training college of preparing the teachers described as above Therefore, the training college will have to do three things

(i) The teacher-educators have to teach through modern methods like roleplay, reflection session, brain storming, group discussion and therefore, they must possess the mastery of such innovative methods The training colleges have updated their curricula but they have to update their own modes, methods and approaches

(ii) Secondly, they should provide basic orientation to teachers on yoga, value education, work experience and social service as a compulsory input

(iii) Thirdly, the teacher training institutions must establish minimum standards of excellence for becoming a teacher rather than producing teachers with IInd class and IIIrd class.

I intend to reflect here on the idea of starting certain new innovations in the field of teacher education and initiating certain experiments in secondary schools

5 *The Role of Government*

The Government should establish at least 20 "centres of excellence" where, along with teaching and research, they may try out new techniques of learning and teaching and prepare self learning materials in various subjects of teacher training. They should also strive to identify and enhance creativity and talent in teacher-educators, teachers and students. They may concentrate on generating greater awareness in community and enhance the resource utilisation of the community.

The second innovation is to have *large classes* The NCERT will have to experiment on teaching large classes because the design of the classes in schools has remained age-old and hence they are totally overcrowded today I would envisage a class of 150 students in the year 2010 for which we have to prepare the teachers now

Secondly, the NCERT may have to produce teaching materials for inculcating self-learning among students and teachers

The Government must concentrate on the following four points for vitalising secondary education.

Firstly, the Government should consider the following.

1 Curriculum reforms
2 Revision of staff pattern and incentives to teachers.
3 Uniformity of salary structure in each state
4 Restructuring the staffing pattern in schools
5 Continuous orientation of teachers
6 Strengthening the higher secondary stage in schools.
7 Examination reforms

Secondly, they should establish the National Board of Secondary Education as suggested by the Education Commission (1964-66, p. 482, para 10 79), which will solely look after qualitative expansion and will prescribe minimum standard for opening a school and for teacher-education institutions

Thirdly, the Navodaya Vidyalayas must be strengthened as they are one of the finest thought-out means of searching talent and helping them to foster

Fourthly, the SCERTs/SIEs must be suitably strengthened as the new innovations will percolate from them to schools

Lastly, the Government must strengthen the NCERT in terms of personnel and resources The nation's perception of the NCERT is positive and loaded with ambitions. People expect so much from (comparatively) such a small institution In the thirtieth year of the NCERT, a time has come when there is no need of review but it needs a greater support and a greater vitality.

In conclusion I may state that secondary education has expanded to a tremendous level but the scope for further expansion is much greater as only a small segment of school-going children is coming to schools. The various Commissions and Committees have offered quite useful suggestions, on the basis of which innovations have started (and I would call the NCERT as an innovation in 1961) and this is the time when we can retrospect, introspect and anticipate.

Indian Society and Education of the Disadvantaged : Some Observations

P C. JOSHI

THERE is a German saying that what is cooked in the kitchen is not produced and decided in the kitchen; it is produced and decided outside the kitchen Similarly, the fate of education is not decided within the sphere of education, it is decided outside it. Whatever may be the wish of the educationists or the will of the planners as reflected in educational policies and plans and the priorities underlying them, they are made and unmade by the social structure With very few exceptions, the entire evidence pertaining to the trends of Indian educational development during the four decades since India's independence provides strong confirmation of this broad generalisation

There is unmistakable evidence provided by numerous evaluations of educational policies and plans which suggests that the ambitious programme of taking literacy and education to the disadvantaged has stiff resistance from the old and new vested interests; and that adequate progress on this front cannot be made without simultaneously advancing on the socio-economic front by trying to change the socio-economic structure It is perhaps safe to remark that in India the planners have never tried to bring about an integration between the plan of educational development and the plan of socio-economic transformation. The educational planner and the socio-economic planner have worked in complete isolation from each other or in complete ignorance of each other at the apex and at the field level.

Judging from past experience one has to conclude that educational policy-makers have worked under the unrealistic and unsustainable assumption that (1) they enjoy a high degree of autonomy within the sphere of education and that there exist enormous possibilities for them to control developments within this sphere; and that (2) what is equally important, education can safely be relied upon to act as a dissolvent of the rigidities and inequities of the social structure

In the recent period with their euphoria for National Literacy Missions and National Educational Policy, the policy-makers have virtually accepted the premise that the social structure will ultimately yield to the pressure of educational policy and strategy and that literacy and education of the disadvantaged must precede their social and economic emancipation. The policy makers are thus guilty of not taking adequate account of the powerful resistances to the education of the disadvantaged arising from the inherited as well as the emerging power-elites in urban and rural India. They are guilty of ignoring all along the massive evidence which, far from confirming, seems to contradict the assumptions about the social structure consciously or unconsciously made by the policy makers. They are guilty of ignoring the insight that seemed to emerge from accumulating evidence that the determinants of education lay outside the sphere of education and that the new possibilities of utilising education as an agent of economic development and social change in favour of the disadvantaged were being thwarted by serious institutional constraints. The policy makers did take note of the fact that in many developing countries, education of the disadvantaged triggered off socio-economic uplift of the disadvantaged. But while borrowing models of education from these countries, they did not explore under what conditions did the education of the disadvantaged contribute to rapid economic and political progress of the disadvantaged.

It is high time that instead of building new educational Utopias or formulating new models of education, we boldly confront and not evade the question of the sharp tension between educational Utopia for the disadvantaged and the constraints of the emerging socio-economic and political system. The task is to adequately understand the nature of this tension and to explore how a more effective strategy of promoting education of the disadvantaged can be dovetailed into an overall perspective of societal transformation and vice versa.

Some observations on problems and prospects of the education of the disadvantaged are being presented here in the light of the basic approach stated above. This entire question of interface between education and social structure offers exciting possibilities of collaboration between educationists, on the one hand, and social scientists, on the other. It can be said without any hesitation that our fragmented perceptions have a lot to do with our flawed models of public policy and public action in the field of education. And the more firmly we move in the direction of evolving an integrated approach and models of coordinated and unified public action, covering economy, policy, society, culture and communication the more we can ensure prospects of success on this vital issue of taking education to the disadvantaged. We become more and more aware of the importance of an integrated and multi-dimensional approach as we make an attempt to put together some basic insights from outstanding educationists and social scientists on how educational possibilities for the disadvantaged continue to be thwarted by the social structure. The fact that these insights have been presented by eminent educationists and social scientists from early years of independence to the present period shows how these structural constraints have proved to be far more persistent and stubborn than we imagined them to be This shows how the thwarting power of these socio-economic and political factors has been vastly underestimated

Our approach to education, as elsewhere, reflecting the basic malady of the Indian ruling elites [illegible] a very romantic or idealistic conception of the importance and role of education leading to very ambitious projections and targets of its expansion co-existing with a total lack of realism about the Indian social situation within which progress in education has to be brought about. One is almost tempted to characterise this as a deep internal "moral discord" (Myrdal) within the Indian society, culture and civilisation. This is a characteristic which has almost an uninterrupted continuity through the ages The great sages who expressed noblest aspiration ever expressed by mankind " तमसो मा ज्योतिर्गमय. " or "Lead me from darkness to light" did not ever seriously come to terms with the fact that the fulfilment of this aspiration (the right to enlightenment) was denied to the vast working masses The tension between the ideal of enlightenment for all and the dominant reality of a hierarchical caste system which restricted access to enlightenment to a privileged minority was never explicitly recognised and resolved by the Indian elite

One is, therefore, struck very much by the continuity of an internal "moral discord" within the Indian social structure even after India's entry into the modern age via her cultural renaissance and her struggle for political freedom. No doubt, the new Indian elite placed a high valuation on education both in primary value terms and in instructional terms. Education was at the centre of the modernisation ideals upheld by the new Indian elite Education was also valued very highly as a means of economic, social and political modernisation But a certain conceptual fuzzyness regarding the relationship between changes in education, on the one hand, and changes in society, economy, culture and polity, on the other, characterises the thinking of the elite as much in the post-independence era as in the pre-independence era. High romanticism about education is pardonable in the case of the pre-independence elite as it had no control over State power and, therefore, no control over economic and political affairs It could at best engage in limited experiments in the educational sphere. But the same type of romanticism leading to fuzzyness in perception regarding the interface between education, economy and society and polity was not pardonable in the case of the post-independence elite.

It is only when the romanticism of the elite received a rude jolt from the failure of educational policies aimed at education of the masses that it was compelled to reckon with the yawning gap between vision and reality, between assumptions about social reality and the actual nature of social reality as revealed through experience The facile assumptions that an educational explosion would vastly contribute to economic growth and social change and that State action to promote education of the disadvantaged would either encounter no serious resistance from the social structure or would easily overcome the resistance from these forces were exploded by unforeseen developments in real life

The evaluation or critiques of the Nehru era in the post-Nehru era reflect a process of soul-searching and self-introspection by the sensitive sections of the Indian elite and by those outside India who shared the vision and aspirations of the Nehru era

The following observations reproduced from these evaluations and critiques are intended to be illustrative; they are not meant to provide comprehensive substantiation of our main argument

Inside India one of the most eminent critics of the educational performance since independence was J P Naik, himself an educationist and policy-maker In an important paper on "Education in India since Independence", Naik summed up his diagnosis of the malady as follows

> "How does one evaluate this crowded hour or post-independence developments in education? What lessons can one draw from this experience?
>
> "What the Education Commission said of the Indian educational system in 1966 was true in 1947
>
> "The dominant view advocated in the last twenty-five years has been that a radical reform of the educational system should be attempted first in order to bring about a social, economic, and cultural revolution This is true to only a limited extent As mentioned earlier, we never tried to radically transform the educational system but contented ourselves by merely expanding it with a few minor changes Even if the attempt had been made, it would not have been very successful in the absence of a simultaneous political effort to restructure society It is obvious that an attempt to reform education, by itself, cannot hope to succeed fully. Similarly, the efforts to introduce a major structural change in society will not also succeed without the help of education What is really needed is a major political and economic effort to change the existing social structure based on hierarchy, inequality, and rigidity, in favour of a new society based on justice, equality, freedom, and dignity of the individual Alongside, there should be an effort to create a new system which is in keeping with national needs and aspirations
>
> "A time has come when we should question the models we have blindly adopted and think seriously of some alternative strategies to solve our problems" (J P Naik, 1977 260-261)

J P Naik no doubt made a radical break from the dominant approach by boldly recognising that "an attempt to reform education, by itself, could not hope to succeed fully" He also posed the issue of looking for alternative approaches and models of education But he did not try to pursue this important insight further by exploring the linkages between educational system, on the one hand, and the economic, social, political and cultural systems, on the other, which would have opened the way for fresh insights and action strategies.

A comprehensive review of changes in education was undertaken in a long paper on "Education and Inequality Theory and Practice" by a young scholar, Malavika Karlekar in 1983 With data marshalled from several sources Karlekar provides rich insights on "the limits to educational reform within the given social framework" and on the "limitations of the educational system in bringing about social change"

Karlekar's analysis thus lends support to the view gaining among all critics of the Indian approach to education that not much can be expected in the field of education and through education unless determined steps are initiated for a far-reaching change in the social structure

In fact, Karlekar's conclusion is in conformity with what Emile Durkheim said in 1987, a statement which she quotes at the very beginning of her paper Durkheim observed·

> "Education is only the image and reflection of society It imitates and reproduces the latter in an abbreviated form; it does not create it" (E Durkheim, *Suicide*, 1987).

Having drawn attention to the limitations of education as a force for social change and the deficiencies of the educational system which do not allow it to reach the poor, Karlekar does indicate what is the source of these limitations and how they can be overcome. The most recent substantiation of the inhibitive role of the social framework in thwarting the spread of education to the disadvantaged has come in a recent article published in *Mainstream* entitled "Why Kedari Cried? Does any One Care?" by Laxmidhar Mishra, the Director General of the National Literacy Mission (L Mishra 1991 21-29) Mishra reveals how, despite a phenomenal expansion in the formal school system, only about half the child population in the age-group 6-14 years is able to regularly attend, participate and complete elementary education" Drawing upon the Fifth All India Education Survey (1986), Mishra shows that there are as many as five crore or one-third of the 15 crore children in the age-group 6-14 years who are not enrolled in school, and what is more striking, that out of 100 children admitted in Class I, only 49 complete the primary stage and only 31 the upper primary or the elementary level

Further, drawing attention to the Operational Research Group's estimate of 4 4 crores of working children in 1983, Mishra remarks that "these working children form the majority of those who cannot get education through the vast school network before they complete 14 years of age"

The information provided by Mishra on the West Bengal situation is very revealing, indeed stunning Referring to the findings of a study conducted by the Indian Institute of Management, Calcutta, Mishra shows that "the upper strata of the rural society in West Bengal has reaped almost all the benefits of the gigantic expansion of educational facilities Not only are their children the sole beneficiaries but even as teachers they have appropriated a major chunk of the huge expenditure incurred by state for the expansion of education facilities This expansion has in fact helped to heighten the differentiation in rural society rather than reduce it The incongenial social condition has made the progress of universal education even more complicated".

This is reflected in the pattern of recruitment in the school system

> "At the primary level, [illegible] per cent of the total number of enrolled students belonged to the three upper strata of the agrarian society, namely, potedars, rich peasants and middle peasants. At the secondary level, 98.76 per cent of the total number of enrolled students belonged to the three upper strata. It is pertinent to note that 100 per cent of the children in the age group 6-11 years belonging to potedar families were found to be enrolled in contrast to 8.66 per cent of the children of the same age group belonging to agricultural labourers. It was observed that [illegible] 17 per cent of the total number of non enrolled children in the age-group of six to ten years were gainfully employed as child labour while 98.67 per cent of the working children belonged to the three agrarian classes – agricultural labourers, poor peasants and lower middle peasants"

These findings are very shocking in so far as they show that the wide chasm between the upper socio economic groups and the rural masses on which attention was focussed by the village studies by the Agro Economic Centre, Santiniketan in the mid-fifties has, instead of narrowing, been strengthened (J P Bhattacharjee 1958: 145). As regards the prospects for education for children labourers, Mishra concludes that "unless children are liberated from the vice-like grip of their employers, that is contractors, sub contractors, no meaningful educational programme can be organised for them and no programme of education can be meaningful unless it is relevant to the life of children"

This overall assessment of the continuing deprivation of the urban and rural poor and specially the children of the urban and rural poor from new educational opportunities provided by State-sponsored educational plans during 44 years since independence is also confirmed by the latest Report of the National Commission on Rural Labour submitted to the Prime Minister on 30 July 1991

Mishra's analysis of the educational scene, however, ends on a note of pessimism as regards the prospects of extending the reach of education to disadvantaged at least in the short run. The question of breaking the interlocking vicious circle of poverty, exploitation, dependence, powerlessness, and illiteracy and lack of education of the disadvantaged still seems to be beyond full comprehension and beyond solution except in selected regions of the country

It was during the mid-fifties that Jawaharlal Nehru had set before the country the objective of setting up a Panchayat, a service cooperative and a school in every village of India. That objective has not yet been realised in large parts of India. It now seems obvious that it is far easier to set up and run big modern establishments than to set up and keep going a village Panchayat, a village cooperative and a village school which encounter the fiercest opposition from entrenched vested interests

Lalit Uniyal, a social activist, working in a Banda village for more than ten years gives penetrating insights into the nature of the social system and the power structure which has thwarted all efforts so far for opening the doors of the Panchayat and the village school for the masses and how the power struggle between the haves and the havenots is always resolved in favour of the haves (Lalit Uniyal 1991: 58-95). Uniyal's insights apply to most regions of the country still dominated by the feudal ethos. As in the village studied by him or being swamped by the ethos of an ascendant capitalism as in more developed villages this fact is confirmed by studies by Jan Breman, Indira Hirway and Ghanshyam Shah relating to Gujarat, by C. Parthasarathy, Hari Gopal and many others relating to Andhra Pradesh, by Pradhan H. Prasad, Arvind Das and others relating to Bihar; by P D. Shrimali, G.P. Mishra, H. Dhar and Kripa Shankar relating to Uttar Pradesh, and by Utsa Patnaik, G S. Bhalla, G K. Chaddha and many others relating to Haryana and Punjab

As pointed out earlier, the most important gap in the analyses of changes in the educational structure is that they try to relate these changes mostly to educational policies and not to policies relating to land reform, agriculture and employment or to patterns of industrial development or technological changes or to manpower planning or to over-all development strategy and planning The fact of the matter is that in the changes in the educational sphere are reflected the cumulative consequences of policies and strategies relating to development, in general, and agrarian reform agricultural growth, technological change and rural development in particular that in the educational changes are reflected the cumulative consequences of our policies relating to political matters (centralisation vs. decentralisation) and social policy regarding backward classes and communities If there is one single issue which has tilted decisively the overall balance of social forces against the disadvantaged in all matters, it is that of half-hearted implementation of land reforms in most regions of India The consequences of this rich peasant oriented land reforms implementation policy have been far-reaching specially in the field of rural literacy and education. The recent development history of many developing countries (Japan, Korea, Taiwan, South Korea, China) shows that poor-oriented land reforms provided the key to far-reaching social changes, that agrarian reform was the most powerful propeller of literacy and educational drive among the disadvantaged (Wolf Ladejinsky 1977, Martin Yang 1970, Gunner Myrdal 1970)

It must be pointed out that the World Development Report—1991 highlights the role of education in the economic breakthrough of many developing countries in recent years The Report has acquired a lot of publicity in our country for its vigorous advocacy of a "market friendly approach" to development, however, in matters relating to education, the Report continues to place principal reliance on State initiative and intervention and not on the market. A major feature of the Report, however, is its reluctance to emphasise that poor-oriented agrarian reform policies provided a key role in the educational breakthrough.

If any lesson has to be drawn from the miracles in the field of economic development and educational progress achieved by several developing countries and by States like Kerala in our own country, it is this that educational breakthrough for the disadvantaged is closely linked with effective multi-dimensional public action in key spheres in a closely coordinated manner In these countries and in Kerala the major impetus to mass education was provided by public action, including state and non-state agencies, aimed at the following

1. bridging the rural-urban gap as an instrument of bridging the gap between the urban intelligentsia and the rural masses,
2. removing the constraints arising from the semi-feudal agrarian structure by strengthening the land base of the poor and by ensuring their continuing access to the land system and to the fruits of the land system on the basis of conscientisation and organisation of the poor themselves,
3. removing the constraints arising from a semi-feudal power-structure through creation of decentralised power centres of local levels in which the poor are strongly represented;
4. making the learning process and the organisation of learning functional to the life-situation of the disadvantaged and taking education beyond the constraints of a middle class vision and perspective;
5. tapping the vast potential of the Communication Revolution to reach the disadvantaged in the remotest regions and to involve the masses on an area-specific basis for generating software relevant to their needs.

The example of several developing countries and of some parts of India like Kerala shows that the constraints on the education of the disadvantaged to-day do not arise either from lack of resources or lack of knowledge but from the dominance of the middle class outlook and approach at the apex and of a powerful coalition of landed, bureaucratic and political elites at the local levels Only a wide mass awakening and a vigorous mass mobilisation can make a dent into this dominance

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Indian Society and Education with Special Reference to the Education of the Disadvantaged Groups

DEVAKI JAIN

EDUCATION is a double-edged weapon, especially in societies where there are sharp inequalities in economic and social position. It may help people to climb out of "lower" rungs of the hierarchies, or economic and social ladders but it can also sharpen discontent with hierarchy and, therefore, "disturb" society.

In the developing or poor countries where even the minimum of basic needs such as food, shelter, health and education are not yet available to all, in fact to the majority, a serious problem is the educated youth, especially the unemployed who are acute sufferers and who are consequently on the war path. They get sucked into restless gangs, who attack, rob, peddle, use drugs and thus criminalise society.

Deprivation or disadvantage because of hierarchies of power—economic and social—is a malady that cannot be cured through the single prong of education, it needs readjustments across the board. It basically needs removal of deprivation, the levelling of society at the base, at least in terms of opportunity or for any *one* hand of help, be it education or employment.

In other words the society—the whole of society—the advantaged included has to take the responsibility for the removal of deprivation, and the sense of disadvantage.

This paper argues then for

1. A stronger emphasis in the curriculum, on the creation of "just minds" i.e. minds which at least are made conscious of levelling, of barrier removing process.
2. Restructuring of the instruments—the organisation of delivery of education to accommodate the living and working conditions of the 'disadvantaged".

3 Increase of "space" in management to accommodate greater community participation in the delivery of education giving people a stake

Curriculum

Lakshmi Ashram is a residential school for tribal girls in the Kumaon hills The morning begins with *Prarthna*--the prayers are basically verses and songs, saying that blood is one colour, so there is no rich poor, dark light, or a song thanking the clouds for rain or of a tree crying out to the woodcutter not to cut it

Food, breakfast is served by children to each other but a portion put into a pot for the children who do not have food--in one of the villages around. Children dig, sow plant [illegible] fruits, spin, weave, cook—as well as pass the matriculation, become [illegible] doctors, even airhostesses some day

Caste came into their lives with the inspector from the Welfare Department who wanted to see the list of the number of SC children so that the grant of freeships could be worked out. The school gave up the freeship assistance, as children who had lived harmoniously began to "know" caste and exercised the cruelties as experienced outside

Who can tell?—whether this kind of input at that time will sustain and make the Lakshmi Ashram alumnae a sharing person conscious of the "other", capable of bridging the stark gaps between the manual and the intellectual? But how can it not? For ten years to live in a community where at least two times a day for at least half an hour all the "culture" is either about Nature or about how to feel equal, similar, close to "another" type of person Surely it could rub off?

Even if 50 per cent of the students came out feeling the strength not only of education, but also the strength of holding, knowing the instruments with which to redress injustice, unequal environments, the educated youth could be both a "non-disadvantaged" category (assuming they came from minority SC/ST or others) as well as a force to remove disadvantage or deprivation And those who are not deprived, would be an additional force to assist that process The children who dig and clean in the Lakshmi Ashram come from families who dig and clean. Thus they are not alienated from their own households and life styles by the school-- another source of problem of the educated amongst the deprived

The curriculum of school education needs to pay more attention to these modes of influencing the mind It is not a class or a period of "moral science" or religious education as it often is in a school--perhaps the most boring period of sermonising It is not the weekly philanthropic visit of the school's social science society to a slum or a "poor" village to stimulate the folks to clean their surroundings or boil their water

It has to be invasive, in the classrooms, through textbooks, through modes of leisure use, through cultural activities

Gandhiji had set a certain time-table in the Ashrams to do manual work, in order not to feel that it was demeaning to clean one's toilet, in order not to feel that it was a dirty task meant for "dirty" people He wanted men to cook and weave—normally women's task, and to simplify their food habits as basically they added to women's work So it was not work reduction through kitchen gadgets but removal of stereotypes especially stereotypes associated with hierarchy

The principle of standing in the other person's shoes is a good one to cleanse oneself of injustice; at least it would make one aware of where the shoe pinches. Thus, if it is claimed that education is knowledge, and that knowledge is empowering, then knowledge of where the shoe pinches certainly should be a fundamental part of education if deprivation and disadvantage have to be overcome through the activation of the whole society and not merely its oppressed part

Many attempts have been made to create this consciousness—compulsory rural service corps, communes, donations They have not necessarily led to the goal of creating greater leavening. Thus there is no perfect solution However, most times the attempt has been in action, not thought Thus the argument here is to introduce the 'sense' of the other into the course curriculum and into extra curricular activities in the "Lakshmi Ashram" way—if that could be used as a short-hand vocabulary

Several years ago, as part of the Gandhi Centenary Celebrations I lectured on Gandhi in six of the most sought-after "public" schools in Delhi like Modern, Columbus, etc Gandhi's conversation with a little boy who asked him why he was not wearing a shirt,—leading to the virtues of the ethic of simplicity amongst the better off as a lever to redress the unequal material base—made such an impact on the children that for several months some of the schools had 'Simplicity Societies' Children gave up birthday parties and so on Naturally it was not sustained Neither I, nor the school had any mechanisms to support the thrill the children felt

Instruments

The poor enrolment and even more troubling drop-out rate of little girls from low resource households—poverty households—is well known Apart from the social perception of females as of "low worth" there is the case of younger siblings Little girls from the age of five are surrogate mothers as well as income earners—they support work, whether in "family based" occupations or in industries using child labour

Many ideas and methods have been moved towards dealing with this social situation

First, to provide infant care facilities near school—or in schools so that the little girl can be near the infant

Second, covering all infants under the ICDS/balwadi-cum-creche programmes so that the girl is free at school time.

But even more useful is changing school hours to suit the families' livelihood and other patterns

The Indian Institute of Education, Pune, under the direction of Dr Chitra Naik, has provided several constructive ideas for extension of elementary education at least cost, while ensuring universal participation of the girl child from the poorest of households—the ones whom the conventional education system is not able to embrace.

Experimental schools run by the Institute in the village function at hours where maximum attendance of children is found feasible This is usually in the evenings. The attendance of little girls at these schools is over 90 per cent of those eligible When asked as to what was the attraction for her to go to school, one of the girls remarked that this exempted her from washing utensils at home Another child said it gave her a chance to meet and befriend other girls The village community itself was infected by the spirit generated by the liveliness of the children at school and was in turn better motivated to help the school in furthering its aims and activities.

Another innovation of the Institute has been in respect of teaching aids. The students at its school in Pune, for example, are given time to go around the neighbourhood of the school and pick up a given number of stray objects Back in the classroom, the students quest about what these objects are, what they represent, how many do they add up to, generates a live interest, it broadens their knowledge and awareness of the living environment besides adding to the richness of teaching aids at no additional cost.

In the coffee-growing areas of South India, the season for coffee-picking and processing coincides with annual examination time i.e March and April Most children drop out as the demand for hands is high and wages equally high Can examinations be staggered according to local conditions? Can school hours be changed to suit the need of girls from the working classes

Interestingly, even the anganwadi hours are odd and unsuitable Usually in the mornings working women do not need child care facilities They need them at mid-day and in the afternoons but that is precisely when the anganwadi is closed

The resistance for change comes from the staff School teachers and creche workers are in favour of standardisation of expectations. In Karnataka an attempt made to change hours and examination timings failed due to the teachers, the lobby of the salaried classes While there is a case that "Board" examinations cannot be in different periods of the year due to the need for uniform flows into higher classes and colleges, until the high school level flexibility could be introduced into these areas of organisation of schooling.

But even as these flexibilities are introduced, there are more basic changes and adjustments which need to be introduced at the macro level

For example, the wage of workers (income of a family) amongst the poor has to have a "minimum" i.e be of a level where the family does not need to put its children to work No parent would really like to punish their children—keep them away from school and play unless there is necessity We see almost immediate transformation of cohorts of rural families as they come into urban salaried classes (Class IV) in terms of children's participation in school But as long as families require "all hands" for livelihood strategies, children will be bread winners first Hence wage rates which ensure a viable livelihood is a precondition for child schooling Thus the role of the labour movement, the efforts to unionise the unorganised, to insist on implementation of the Minimum Wages Act is part of the package for ensuring their children's education

More specifically for girls, another macro package is a must—namely proximate civic amenities which would reduce the time and drudgery of "women's work', i e fetching water and fuel, cooking and child care. This is where a girl child's time goes

Naini is an 11-year-old Mina girl of Etrampura, a small village of 57 households in Bharatpur district in Rajasthan Hers is a joint family of nine which includes her parents, uncles, an aunt and a younger brother The family owns eight bighas of land—lives by its produce, occassionally hires labour or hires itself out depending on the season The father and the uncle plough and dig while Naini, her mother and her aunt weed, pack groundnut, cut grass

Naini's uncle, 19-year-old Kardiram, goes to high school in Bhusawar, five kilometres away and her younger brother Chuttanlal goes to school in the neighbouring village of Chentoli, where he is in the 3rd standard. Naini assists her parents in household chores. "Who will do all this if I go to school?" says she when questioned

Rising at 6 in the morning, Naini's first task is to make cowdung cakes for an hour This is followed by going to the well to fetch water Returning to the house, she sweeps the courtyard in front. At 7 30, she sieves the wheat flour, lights the fire and assists her mother to prepare *rotis* The family sits down to eat *daliya* and *bajra rotis* in brass *thalis*.

It is Naini's daily task to clean the utensils after breakfast. After packing some lunch for the family, she sets out with her mother to their field which lies on the border of Mehtoli and Etrampura, about three kilometres away. In September, a quarter of the field is covered with capsicum while the rest is ploughed and got ready for the next crop She and her mother are assigned the task of weeding the field This she does from 9 to 12 noon, goes home with her mother to cook some lunch while her father and uncle remain behind and eat in the field

She cuts the potatoes while her mother prepares the *rotis* After taking lunch, she washes the utensils and again goes to the well to fill another pitcher of water. Having done this for two years already, Naini pulls up the water with great ease.

From 2.45 in the afternoon Naini is seen again on her field, cutting the grass for her cattle By 4 in the evening, she has collected a big bundle which she ties, and carries home This she deposits in the cattle-shed Her uncle will cut it later and feed it to the cattle

Adjoining their mud-hut next to the cattle-shed is a little store-room, from where Naini takes out the cowdung cakes which are prepared by her every morning, and the firewood which she and her aunt had collected last week. With the help of these cowdung cakes Naini fires the oven, and cooks *daliya*. She then sweeps the house for the second time

Preparation of food is usually done by her aunt. As she is very sick these days, this task is shared by Naini and her mother.

Once dinner is ready and Naini's daily tasks have been completed, she finally finds half an hour to sit down and relax which she does chatting and teasing her brother Chuttan, who has kept aside his books. At 7.30, when it is time for dinner, she serves *daliya*, boiled milk and *bajra rotis* to all the family. She then joins them for dinner whicy they eat in the light of an oil lamp

After cleaning the fireplace at 8.30, Naini rolls out Chuttanlal's and her mattress and gets ready to sleep, to get fresh for another tomorrow

Khayrum is a 12-year-old Muslim girl, whose father is a beggar, having no land of his own and being too old and feeble to work as an agricultural labourer Khayrum's father Sheikh Siddiq goes from house to house both in the village and in the adjoining villages begging for alms.

Khayrum's home is in Kuita, a large predominantly Muslim village towards the east of Birbhum district in West Bengal. The village has an abundance of water which keeps the vegetation lush all the year round Kuita is a village of mud-walled houses which is ringed by coconut trees and shallow ponds with green paddy fileds around. She, her father, her two brothers and a sister live in a small mud-dwelling with a private courtyard

Khayrum Khatun and her brothers and her sister do not go to school partly because they do not have decent clothes to wear, but more because they cannot afford the occasional expenses that are incurred in spite of the fact that there is no fee. Her brothers spend most of their time playing marbles and *gulli-danda* outside their house

While her brothers play, it is Khayrum who is the real housekeeper She attended school for only one year but had to drop out because she had to look after the house when her father became seriously ill, and her mother was kept busy nursing him.

She does the sweeping, fetching water, collecting firewood for the house on days she is not going to her master's house But on most days Khayrum goes to work in a household of a Muslim landlord in the same village where she gets her meals and a rupee for the day This income is vital to the family.

She has to leave at 6 in the morning for her master's house which is about two kilometres away. On reaching their house her first chore for the day is to wash the utensils used by them at breakfast The next hour is spent swabbing the mud floor Khayrum then has to go to the nearby pond to fetch water; she has to go twice for this which takes her two hours

She then cuts the vegetables and grinds the spices This takes her just over an hour She is then given some boiled rice by the mistress of the house in a small clay bowl.

In the afternoon, while the mistress rests, Khayrum takes the baby in her lap and sings her a lullaby for two hours About 4 in the evening, when the mistress wakes up, she has to go again to the pond to fetch water, and then she cleans the utensils. About 6 in the evening she cuts the vegetables for half an hour and while the mistress is cooking she carries the baby in her arms Her dinner consists of some rice and vegetable curry which she is given at 8 in the evening An hour later Khayrum returns home after being out for nearly 15 hours

Naini and Khayrum belong to 77 per cent of girls, between the ages of 5 and 14 in rual India, who do not go to school. Perhaps this will be so till their mothers and fathers earn enough to manage without their labour time, or there is a good day care centre for children where for zero cost, the sibling can be left, or where firewood and water are nearby and affordable.

When they grow up, they will probably get married into a village close by, to another self-cultivating household, bear children and lead a life similar to what they led as young girls, with the added responsibility of cooking and looking after the children in their first few years

Tap water, piped gas, for rural households may look like wild dreams but its link to the girl child's education cannot be minimised It is such infrastructural investment that will clear the way in a more efficient manner to the education of the "disadvantaged". Without such infrastructural investments the approach will be ad hoc and the "Bite" or the connection will not be sustainable

These "area development" type investments are not given the importance that they deserve—yet without this "overhead" the efficacy of the service is truncated. The argument here can be strengthened by reference to the case of small scale industry After many years of experience the small scale industry sector managed to persuade the policy makers that their viability and sustainability depended on being provided infrastructure as a common facility—something that large industry can build into its costs Thus there are today industrial estates like OKHLA on the outskirts of Delhi, PINYE on the outskirts of Bangalore, and so on The SSI sector has an export value in India which is greater than the large sector

Institutional Framework for Educational Services

In this area, too, there has been much discussion and many efforts to reach the child with education One of the ongoing debates is to decentralise schooling, i e let the teacher be accountable to the panchayat; let the resources be handled by the locally slated body.

The Karnataka experiment in decentralisation of management of the primary schools and bringing them under the supervision and control of elected Mandal Panchayats has eventually solved the problem of gross abstention of teachers which has defied a solution persistently Within weeks of the Mandals being elected and exercising control over the management of the primary schools, the attendance of teachers rose to over 90 per cent. besides the community's control over the schools also ignited the community's interest in the improvement and expansion of the school facilities. An evaluation report on the working of Panchayats in Karnataka by a high power committee (headed by Dr K S. Krishnaswamy, former Deputy Governor of the Reserve Bank and a leading economist) found that the community's contribution to additional building area for schools or improving existing buildings within a period of two years was as much as what the State had been able to provide in a period of about ten years

The other side of "local management" of schools is also a reality. Butiama is a village in Tanzania, - it is the home of Dr Julius K Nyerere, the former President of Tanzania --a 'teacher' to the world. It may be recalled that Tanzania, a poor country, which has many handicaps, is known for having achieved a literacy of about 100 per cent

Butiama, like other villages in Tanzania, has an elected village council and its teachers are locally selected and the school is under the supervision of the local body It was found that the village leaders could often persuade the teacher to get the children out to their field during the peak seasons of soil preparation and harvesting The teacher obliged - he was part of the community But the more alert parents then removed their children from the school and sent them to Dar-es-Salaam

This issue of outsider-insider for engineering transformation has been discussed in many forums, not only educational, and at many layers including philosophical. There can be no 'clear' choice What, however, does appear is that parents will send their children to school as well as not misuse the school if they felt that the education would empower their economic status, i.e increase their livelihood, apart from social status. But in the majority of cases, especially amongst the disadvantaged, there is very little hope these days that the education leads to anything—except idleness, alienation and restlessness.

Here too therefore there is need for a macro intervention: namely, an employment policy which absorbs all those who need work The concept of Right to Work which was hotly debated during the earlier political era, considered this condition. However, since the concept has legal and other connotations it was modified to a full employment approach and goal.

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Indian Society and Education of the Disadvantaged

N K JANGIRA

MODERN society is what education makes it Education is what society wants it to be Without digressing into the proverbial hen and egg controversy, interdependence of both in shaping each other's personality can be safely assumed Education echoes concerns of the society, evolves ethos, develops its psychological personality and helps generation of wealth through human resource development. What education generates is recycled to enculturate personalities of both (Jangira, 1985). It stimulates change, sometimes reaching threatening turbulence threshold, but it also moderates turbulence striking socio-psychological equilibrium in society. Thus, it performs both generative and adaptive functions, the former contributing to development and the latter making change less painful. Education for all, therefore, is not mere euphism. It is the survival need of modern societies skilling at breath-taking speed

How does education respond to the needs of the emerging Indian society? Will it be able to generate a constructive challenge and, at the same time, effectively respond to the unexpected challenges generated by other sectors? Can it meet the uncertain challenges of the nineties ushering the Indian society into the twenty-first century with a note of confidence? The canvas of the question is vaster than the scope of the paper The focus will be on education of the disadvantaged General developments are, however, referred to in passing to the extent these provide the framework to present the central theme. It has been organised into four sections The first section visualises development scenario of the Indian society and the second defines the disadvantaged, in general, and in the context of education in particular. The current status of education of the disadvantaged comprise the third section and perspective for the nineties has been outlined in the final section. The approach is primarily reflective supported by research, wherever available, and critique of current developments chronicled in technical as well as non-technical literature

Development Scenario

The planning in India has been often described as planning for uncertainties (Rajan, 1990). The observation seems to be more true today than it used to be in the eighties despite some ominous developments at the political front The Indian society is passing through a phase of painful uncertainties (Malhotra, 1991) Politicisation of every sector of human development and strains in the political system have accentuated the uncertainties These are not unnatural in themselves in developing societies, but beyond a point, these do become dangerous portents. The apprehension gains ground due to fragmentation of political parties and prevailing sense of insecurity increasing the propensity to irrational behaviour for survival and power broking rather than larger human interest (Limaye, 1991). It is not easy to predict the period of continuance of the uncertain phase at this juncture, but it seems to linger on through the nineties requiring adaptive education

We may feel bold and optimistic, but its fall-out affecting all sectors of development is inevitable For example, despite population growing at alarming rate, it has not been possible to evolve an effective policy based on pragmatic incentives and disincentives (Yadav, 1988). With the result, infrastructural facilities are overstretched nullifying gains of development and depredation of environment severely depressing the quality of life of Indian masses (Buch, 1989). The process is likely to continue unabated requiring meaningful educational effort to design correctives translated into action Similarly, despite the poverty alleviation programmes, the belated globalisation of Indian economy is likely to thaw because of political compulsions The below-poverty-line population is also likely to increase at least during the transitional nineties The affluents, be in organised or unorganised sectors, will continue to use neofeudualistic power to stall or slow the pace of empowerment of the disadvantaged in the absence of political will and action (Commissioner SC/ST, 1987)

The extensive use of science and technology is making significant contribution to the modernisation of the Indian society The trend will further gain momentum in the nineties With the size and multiculture character of the Indian society, different levels of development right from the primitive stage in remote areas and some tribal belts, through the pre-industrial phase in rural areas and the industrial in semi-urban and urban areas, to the post-industrial phase in metropolitan cities, will have to coexist through the nineties Bullock carts outside the jet set airports, back-breaking manual carriage alongwith conveyor belts, kerosene lamps with halogen street lights, ultrasonic diagnosis with Ojha-based diagnosis, confident nuclear physicist at the door of astrologer for prediction of success, are some of the contradictions that will continue to be the characteristic feature of the Indian society It implies that the Indian society should be perceived as a conglomeration of developing societies transitioning from one phase to another Education will have to guard against the dehumanising effects of these contradiutions and consequent societal tensions which often result in exploitation of weaker sections.

The beginning of the era of free economy aiming at increased investment to foster rapid economic growth is to be viewed as a challenge as well as an opportunity. It may be a painful transformation to begin with "The commercialisation of life is not a pleasant prospect but it is the price we have to pay for prosperity and efficiency We have to put up with politicians in a democracy. In the short term it will exacerbate inequality but in the long term it will lead to a much more democratic work place" (Das, 1991) Skilling of labour and professionalisation of work force are natural outcomes Adequate educational response can considerably reduce painful transformation of the work-force on the one hand, and generate manpower with new skills on the other It will surely increase employment opportunity for educated youth (Singh, 1991) Vocationalisation of education matched with manpower demands in different sectors spread in specific geographical areas can contribute significantly to economic growth resulting in the improvement of quality of life of individuals This component of education needs special review in the light of its slow progress to design correctives to accelerate its pace and improvement of quality. Probably, effective programmes or institutionlised vocational training for schoolers and non-formal vocational education for out-of-school youth will have to be planned. It will be in greater focus during the nineties.

Globalisation of the Indian economy, free national economy, too much-politicisation, political uncertainty, extensive use of science and technology, disparities in development level of geographical areas and different sections of population will result in unhealthy competition, a sense of insecurity and tensions in the Indian society Linguistic issues, sharing of resources, exploitation of religious sentiments, communalisation and regionalisation of issues for power broking are manifestations of the uncertain present and the immediate future. It has also resulted in violence and corruption. A social scientist will term this as erosion of values The value conflict in individuals and groups will permeate the nineties. Education, therefore, will have to play generative, ameliorative and adaptive roles to develop a learning, self reliant, confident, non-violent and humane society (NCT, 1986; CR, 1990).

The profile of the Indian society has not been painted pessimistic deliberately. The purpose is to face the reality without blinkers. The Indian society does have achievements of significance to its credit during the post-independence period. We have the third largest trained manpower in science and technology in the world. Our scientists and technologists have a number of achievements to their credit in the field of agriculture, medicine, peaceful uses of nuclear energy, space and computer science They, along with our farmers, ushered in the green revolution which did not improve the nutritional lot of the Indian masses alone, we could also be of help to other countries in distress. From an agrarian society burdended by colonial exploitation, it has developed into a modern society despite some grey areas The modernisation trend will have to be strengthened despite tensions which are nothing but birth pangs of a modernising society. The base of excellence in all sectors will have to be broadened It requires a highly generative education

Clearing the Terminological Web

Who is disadvantaged? Who are legally defined disadvantaged? Is there generic definition or is it specific to different sectors? If latter, what is its definition in the context of the Indian society and education?

Chamber's 20th century dictionary defines the disadvantaged as those "deprived of the resorces and privileges usually social, enjoyed by the majority of people" (Kirkpatrik, 1984) The New Webster's dictionary goes a step further specifying the lacking basic conditions as standard housing, medical and educational facilities, civil rights believed to be necessary for equal position in the society (Finnegan, 1979). To this may be added food in the context of developing societies The term refers to social justice and mobility towards equity. Pragmatically, it is the right to a reasonable level of standard of living and quality of life, the level being relative in a society. The definition is generic mostly translated in policy propositions in the Human Rights Charter and the Rights of specific groups like children, women, workers and disabled persons. These are also reflected in national constitutions and legislations. Sometimes states also legislate on some of its aspects

To achieve the cherished goal of establishing an egalitarian social order with equity for all sections, the Constitution of India enjoins upon the state "to strive to promote the welfare of people by securing and protecting effectively as it may, a social order in which justice—social, economic and political—shall inform all the institutions of the national life" Article 46 further prescribes that "the state shall promote with special care the education and economic interests of the weaker sections of the people, and, in particular of the Scheduled Castes and Scheduled Tribes and shall protect them from social injustice and all forms of exploitation " The resolve found expression in abolition of untouchability, positive discrimination in favour of socio-economically oppressed scheduled castes and scheduled tribes for education and employment; abrogation of immoral traffic in women; and protection of the religious, linguistic and racial minorities

The limitation of the definition of the disadvantaged based on caste, religion, language and race is that it treats the condition as static while, in reality, it should be dynamic with socio-economic mobility Secondly, the disadvantaged, once empowered through positive discrimination, form a vested group to perpetuate the privileges at the cost of their own community members waiting at the lowest rung (Raza, 1987). Thirdly, the definition does not include in its scope certain disadvantaged groups transcending the basis of legal definition. For example, disabled persons and the poor among the caste population remain outside the ameliorative process for long The same is applicable to the legal definition of backward classes legislated by the Centre. The term "weaker sections" provides the scope for review and redefinition of special groups. Outside the scheduled special groups, the scope extends to disabled persons, women, bonded labour, and population below the poverty line The NPE-1986 has included women, scheduled castes and scheduled tribes, minorities and the handicapped for special attention in the section on equal education opportunity (GOI, 1986).

The definition and redefinition of the disadvantaged is still inadequate in the context of education. If "education for all" is the goal, then each child must be helped to learn and achieve to his or her potential. At least, the prescribed minimum levels of learning cannot be compromised. What aout the child from an affluent family who cannot achieve the minimum levels, not because of lack of resources, but because of the conflict in the family or denial of love and affection creating emotional block to learning? What about the child from a poverty-stricken home of a caste family whose educability has been impaired because of lack of early stimulation? What about caste homes where education is not a value and the child comes to school just for the sake of it? What about caste girls who under the social and home chores burden fail to learn? What about the child who is forced to change language and even medium of instruction due to mobility of the parents? These may not be covered in the legal definition and state sponsored ameliorative development programmes, but should these not be considered educationally disadvantaged? If not, why? Should these not be considered educationally disadvantaged only because they do not fit into the conventional groups of socially disadvantaged?

The normal answer to the questions posed above is based on the premise that the socio-economic disadvantage and educational disadvantaged mostly are co-travellers Up to this point it is within the tolerance limits But its corollary that other than these cannot be educationally disadvantaged is fragile and even dangerous proposition coming in the way of optimisation of returns from investment in education Educationally disadvantaged should, therefore, be defined as "those children who either do not have educational opportunity or those whose academic learning and performance is persistently below their potential, or below the prescribed minimum level of learning due to any factor within the child, within home, within school, or due to interactive effects of all the three" Only this definition can be responsive to the demands of 'education for all' in a modern society, the Indian society of the nineties being no exception to it.

Situational Analysis

What is the current status of education of the disadvantaged in the context of education for all? What special efforts have been made to meet the constitutional obligations and the emerging policy initiatives in this regard? To what extent have the efforts been fruitful? Are we satisfied with the level of success achieved so far to realise equity in education? If not, what are the grey areas? What should be done to reach the ultimate goal? These are some of the questions under scrutiny in this section

The socio-economic state and literacy rate constitute macro indicators of equity in eduction while access, enrolment, retention and success manifested in learning and achievement are micro indicators Regional imbalance and intergroup disparities are other micro indicators. These are discussed in the context of special groups identified in the NPE, namely, women, scheduled castes and scheduled tribes, minorities and handicapped for special attention to achieve the goal of equal education opportunity The nomenclature of the groups has been changed to suit the school stage The groups are not mutually exclusive necessitating cross referencing to reconcile the overlap

The Girl Child

Female literacy is related to family size and infant mortality rates (ORG, 1990). It is also related to education and care of children. It is, therefore, essential to examine female literacy before considering education of the girl child Although female literacy witnessed considerable increase, its rate of growth remains lower than the population growth rate on the one hand and lower than the rate of growth among males on the other, resulting in expanding illiteracy among women. The literacy rate differential in favour of male population persists Regional disparities in the growth of female literacy widens interstate and intrastate variations. In the states of Bihar, Uttar Pradesh and Arunachal Pradesh, female literacy is below twenty per cent. The states of Haryana, Assam, Karnataka, Meghalaya, West Bengal, Sikkim, Gujarat, Manipur and Punjab have more than half of the female illiterates (Census of India, 1991). At substate level the situation is still worse. It was mere 1 67 per cent in the district of Jaisalmer in Rajasthan and 0 23 per cent for rural scheduled caste females in the same district (Census, 1981) In certain communities female literacy is negligibly small because of social inhibitions (Rajwade, 1980). It is in contrast to hundred per cent literacy in the Ernakulam district of Kerala state

The epithet, the lesser child, to describe the Indian girl child seems to be a reality due to socio-cultural disadvantage which permeates her life. Female foeticide and infanticide still persist in certain areas and communities (DWCD, 1989, Lingam, 1991) Those who survive suffer from negative discrimination at home, in school and community througout life. In the family, she is the last recipient of medical help, food, clothing and opportunity for education Even when she has the access, the quality remains inferior to what is available to the boy She bears the maximum brunt of the family poverty, home chores and labour in place of work outside the home (Nayar, 1985) The bane of dowry and consequent ill effects haunt her childhood. In school, the textbooks still perpetuate sex bias despite curriculum reform (Kulshreshta, in press) In employment, her chances of being excluded from certain sectors and restricted mobility beyond a point is a reality (Subramanian, 1991; Nautiyal, 1984) Her dreams for achieving excellence go awry.

Her lot is worse in rural areas Scheduled caste girl child is doubly disadvantaged If she also happens to be with cognitive or physical impairment, she faces three-fold disadvantage. Those who survive these adverse conditions in vulnerable years, however, develop immune system to survive longer than their counterparts on the average Infinitesimally small number who achieve status in society due to sporadic spark of excellence are used for demonstrative purposes as defence mechanism to own responsibility for perpetuating inequality (Ghosh, 1991).

At the micro-level, there has been significant achievement in access to education during the post-independence period The states of Andhra Pradesh, Gujarat, Haryana, Nagaland, Punjab, and the union territories of Chandigarh, Delhi, Lakshadweep and Pondicherry have achieved almost universal educational provision at the primary stage within habitation or a walking distance of one kilometre Overall facilities are available to about ninety-five per cent of rural population (NCERT, 1989) The situation must have further improved in the post NPE phase to implement the scheme of Operation Blackboard At the upper primary stage, over ninety per cent of rural population is covered by educational facility within habitation or a walking distance of three kilometres in the state of Andhra Pradesh, Goa, Gujarat, Haryana, Kerala and Punjab, and the union territories of Chandigarh, Daman and Diu, Delhi, Lakshadweep and Pondicherry (NCERT, 1989). Nonformal education centres also facilitate girls' access to education (Yadav, 1987).

The problem of access for girls is acute at the upper primary stage as in some areas and communities the parents do not send girls to school even at a distance of three kilometres It becomes all the more difficult at the secondary stage which covers only three quarters of the rural population within a distance of eight kilometres. At the higher secondary stage, only half of the rural population is covered (NCERT, 1989) The implication is commutation or availing hostel facilities by girls at the secondary and higher secondary stage Social prejudice comes in the way of the former and boys get preference for hostel placement even in affluent families. Access is still more hindered in communities and areas demanding segregated school for girls because of socio-cultural conditioning.

Another area of concern is low coverage of only fifteen per cent of population by any type of facility for Early Childhood Care and Education (CR, 1990) The girl child is doubly disadvantaged due to low coverage They themselves lose the opportunity for improvement of educability. Their access to even primary education is adversely affected because they are detained at home for mothering young siblings

The socio-cultural constraints adversely affect enrolment and retention of girls in education A few trends are clearly discernible in the Fifth All India Survey.

Despite near universal education provision, enrolment ratio of girls is much lower than that of boys in whose case it has reached almost universal level at the primary stage. The gap between the enrolment of girls and boys widens progressively at subsequent stages due to steeper fall in the case of girls than boys. There are wide interstate and intrastate variations in both enrolment and retention. The populous states of Uttar Pradesh, Bihar and Rajasthan have only half of girls in schools at the primary and only one-fifth at the upper primary stage. The situation is no better in the states of Andhra Pradesh, West Bengal, Orissa, Madhya Pradesh and Arunachal Pradesh. Scheduled caste and scheduled tribe girls in rural areas are more disadvantaged than the rest. Percentage of girls in vocational courses is also lower than that of boys.

In terms of the content of education, equity has been achieved explicitly in the school curriculum (NCERT, 1988). Even at the plus two stage, girls have access to all available courses. But two threats to equity in the content of education still continue. The sex bias in textbooks and teaching by culturally conditioned male teachers predominantly. Even female teachers tend to stereotype curriculum transaction for girls (Kulshreshta, in press). The cultural bias brought by boys to school from home further complicates the situation in coeducational institutions. The hidden curriculum works against the educational interest of girls. It is also likely to affect their learning and achievement adversely despite occasional sparks of excellence. No doubt, their chances of success are more limited than those of boys.

The challenge of education of girls due to sex prejudice in home, community and school, reluctance of parents to spare girls for education due to perceived higher utility value for home chores and other economic activities, reluctance to allow girls to commute for education to upper primary and secondary schools, demand for segregated schools for girls in non viable areas, covert resistance to the empowerment of women through basic education and training; and reform in curriculum and teaching to ensure equity will have to be met with determination in the nineties. The neglect of education of this section of population can be at our own peril since it is positively related to several vital societal development factors including utilisation of assistance (Sundri and Kamlabai, 1991).

Scheduled Caste and Scheduled Tribe Children

Scheduled castes and scheduled tribes are severely disadvantaged groups due to social, economic, political and educational backwardness. The problems of the two groups, however, are qualitatively different. The former have been forced to occupy the lowest position in the socio-economic hierarchy of the highly segmented Indian society. They are deprived of not only the right over productive resources, but also of just fruits of labour (Goyal, 1981). The scheduled tribes are located on the margin in terms of geographical regions and the traditional socioeconomic structure. Both are victims of development strategy operating with the explicit claim of 'growth with equity' rather than 'equity first'. Whatever be the intention, this is the ground reality Without entering into debate about the choice, it is evident that the inequities increased in economic terms despite declining below poverty line population. In retrospect ameliorative programmes remained notional till Special Component Plans were conceptualised The hopes based on the percolation theory were belied In reality only twelve per cent of forty per cent families receiving special assistance benefited while the remaining lost their assets (GOI, 1990).

The backlash of the development strategy has been severe on the vulnerable sections of the society It is particularly harsh on members of the scheduled castes who face a double lash due to increasing exclusion from the larger economic system and devaluation of skills in modernising production modes The backlash is traumatic for members of the scheduled tribes who face serious dispossession and displacement from the natural habitat (Burman, 1989, Commissioner SC/ST, 1987). There are layers and layers of deprivation (Raja and Premi, 1987) The lot of the scheduled tribes is better in the North East where education preceded development incidentally than in midland India where reverse has been the case. The socio-economic deprivation of these groups is maximum in the states of Bihar, Rajasthan and Uttar Pradesh In other states too it is a matter of concern

Apprehending empowerment of these groups threatening the traditional neofeudalism, the dominant castes and other vested groups in the power structure try to maintain their hegemony blocking educational development of these groups through overt and covert operations. The social reformers and educated youth from these groups who resist oppression have to face the wrath of this lobby (Week 1991) Even within these castes and tribes, once empowered, individuals form a vested subgroup for self preservation (Commissioner SC/ST, 1987, CR, 1990) Socio-economic stagnation is the natural outcome (Yadav and Jangira, 1985)

The situation regarding the availability of educational facilities for SC and STs is practically the same as described in the preceding subsection on the girl child Incentives like attendence, stipends, free textbooks, uniforms, midday meals, residential ashrams and hostels, pre- and post-matric scholarships, etc. are available to improve enrolment and retention of children from both of these disadvantaged groups The effectiveness of these incentives however has been questioned, of late, by empirical studies (CR, 1990)

At the macro level, differential literacy rates for the scheduled castes from the 1991 Census are not yet available If the gender trends are any indication, the continuity of the earlier trend may feature this group too An examination of the 1981 Census reveals that the literacy rates for the scheduled castes are just half of the literacy rates for the non-scheduled castes The literacy rate for the urban scheduled caste males is twice that of the rural scheduled caste males The literacy rates for the urban scheduled caste females is three times that of the rural scheduled caste females (Aggarwal, 1987) The interstate and intrastate disparities are large enough to cause concern. The literacy rates of the scheduled tribes are even lower than that of the scheduled castes (NCERT, 1989).

The enrolment of the scheduled caste and scheduled tribe boys has reached the level of their population proportion at the primary stage. To that extent the access policy in education seems to be successful (Desai, 1990). The gross enrolment ratio, however, conceals more than it reveals. The girls are far behind. The deep decline in subsequent stages is indicative of the higher drop-out rate. It implies that the differential in enrolment and retention between SC and ST boys and girls will progressively increase accentuating the disadvantage unless effective corrective steps are taken. It also requires research on intervention strategies, incentives and other development schemes (Yadav, 1991, 1983) For example, the provision of scholarship is at the secondary stage. Only those one per cent of the disadvantaged groups who have the wherewithals to survive the initial struggle and have the means to educate their children in residential schools can avail these incentives Those at the bottom of the disadvantaged will be kept out of the race (Commissioner SC/ST, 1987).

A similar trend obtains in the enrolment and retention pattern of ST children so far as inter-sex and inter-regional disparities are concerned The enrolment ratios in their case are lower than that of SC population. By and large, the linear relationship between the literacy rates of 1971 and 1981 are indicative of the continuity of the literacy pattern over a period of time. It also implies that the forces of change, social and economic, have not made contribution to the absolute literacy profile. A high negative correlation between literacy, and ST population concentration index indicates that the strength of tribal population itself is a barrier to the spread of literacy Strangely enough, urbanisation does not seem to affect higher literacy at macro level (Ahmed and Nuna, 1987).

Equity in content and process of education is available theoretically, but in practice there are problems. Both have been found to affect learning and achievement (Murlidharan, 1990; Bevli, 1990) The language problem further accentuates the learning disadvantage (Pankajam, 1990) Hidden curriculum transacted by predominant non SC/ST teachers having low expectations accompanied by the lack of support from home makes their task still more difficult The lack of teacher sensitivity to individual needs in large classes or multiple class teaching millieu pushes most of these children to the rock bottom of academic learning and achievement. Those who are frustrated beyond a point, are pushed out of the system due to educational darwinism. Qualitative change in curriculum planning and transaction to meet individual needs in the classroom will have to be planned for the nineties.

Children of Minorities

The National Policy on Education, 1986 identified Muslims and Neo-Budhists as educationally backward minorities requiring special attention for equal education opportunity (GOI, 1986). The Programme of Action identified forty-one districts with concentration of minorities to start ameliorative action (GOI, 1986).

The problems of religious minorities are mostly in common with other communities with social disabilities (Ahmed, 1987). The differentiated data base is not available at macro level. A few available micro studies can therefore be examined for situational analysis. Saxena (1983), in a study involving 45 districts spread over 12 states found that the enrolment ratio of 12.39 per cent at the elementary stage is below the Muslim population proportion of 17.32 per cent. The difference increased considerably in subsequent stages. The trend is supported by CRRID (1981). The enrolment trend gets replicated in performance (Sherwani, 1979).

Although differentiated figures for female literacy and enrolment of muslim girls are not available, the national trend seems to be more pronounced in the case of this disadvantaged group due to social bias in favour of males (Qadri, 1981). Other causes of low education are migration of education prone elitist group at the time of independence (Ahmed, 1987), low employment status resulting in negative perception about the utility of education and conservative trend to confine to education in religious schools due to sense of insecurity (Ahmed, 1987, Shah, 1986).

The major task during the nineties will be to create data-base on education of minorities from the analysis of Census 1991 and monitoring of educational status in the NCERT surveys, remove the perception of insecurity through confidence building measures and promotion of secular education in muslim communities through broad basing their religious schools and effective curriculum transaction in other institutions to meet individual needs.

For Neo-Budhists, action for other social communities like scheduled castes and scheduled tribes is required. The data base will have to be developed for this group also.

Disabled : The Forgotten Child

Globally, education of disabled children evolved through five stages, namely, the stage of benign neglect and even ostracisation of disabled persons, the stage of pity and compassion based on religious considerations to reduce misery leading to care in homes for the destitute, care and help in hospitals and special schools, education in general schools to mainstream and integrate, and the concept of special needs based on the premise that all children encounter learning problems in some areas at one time or the other in their educational career (Jangira, 1986). In India we are between the third and the fourth stage transitioning from the special school stage to education in general schools which started with the transfer of the scheme of Integrated Education for Disabled Children from the Department of Welfare to the Department of Education in 1982. The final stage is being planned through field demonstration projects (NCERT, 1987, 1991).

Prolonged exclusion of disabled children from general education system in the country resulted in several adverse consequences There is still resistance in education departments in states and union territories to accept it as a legitimate responsibility despite pronounced commitment to 'education for all'. The special schools continue to be isolated leading to under utilisation of resources, on the one hand, and general schools starved of professional expertise, on the other Limited number of special schools and slow preparation of general schools to meet special needs has resulted in dismally low participation of disabled children in education. It resulted in low achievement of enrolled children with disability due to conventional low expectation in special schools, lost opportunity for integration in early years, lack of opportunity for mutual reinforcement of special and general education pedagogies, lost opportunity to reform teacher education to meet special needs in the classroom, and, above all, pushing the goal of 'education for all' further in time space due to underestimation of the size of this segment of the disadvantaged population (Jangira, in press)

The disabled children suffer from the historical forgetfulness of the educational system. Even in the post-independence period, they continued to be forgotten by committees and commissions till the National Commission on Teachers considered it on persistent pea by the NCERT. It was included in the National Policy on Education at the last moment through intervention by the NCERT and a few NGOs. It was again forgotten by the Ramamurthy Review Committee which again considered it at the last moment through NCERT intervention. With the result, the opportunity for national debate was lost. The policy needs review and refinement reflecting clarity rather than ambiguity and contradictions in recommendations. Whether the forgetfulness is due to the attitude of educational administrators and planners, or because of lack of adequate information, or weak advocacy, is a moot question (Jangira and Mani, 1990). There is, however, little doubt that these children form the doubly disadvantaged group in education. They are disadvantaged by disability as well as by prolonged neglect by educational planners and practitioners Special efforts are therefore called for to clear the accumulated backlog in the nineties.

The data-base regarding the estimates of children with disability and their participation in education is extremely limited Global estimates indicate that every tenth person has cognitive or physical impairment In developing countries it ranges from 15 to 25 per cent An estimated 75 per cent of them live in developing countries (O'Toole, 1991) In India, the National Sample Survey in 1981 estimated 4 3 million school-age disabled children (NCERT, 1987). These are, however, gross underestimates, since these do not include children with cognitive impairments, children with hearing and speech impairment in the age-group 0-4 years, so important for early language and speech training to improve educability Moreover, increasing violence, tension, drinking, smoking and limited health facilities in rural areas are pointers to higher incidence of disability.

Even mild disabilities which are likely to be overlooked in surveys are significant for education since these result into learning problems.

In the absence of regular collection of statistics about institutions with facilities for education and enrolment, it is difficult to estimate access and participation of disabled children in education. The NCERT surveys and the statistical returns of the Ministry of Human Resource Development do not cover information about this disadvantaged group. Even the Ministry of Welfare does not have systematic mechanism for periodic collection of information The 1000 odd special schools are mostly concentrated in metropolitan cities. Out of the mapped 452 districts 215 do not have any special school (RC, 1990). There is serious regional imbalance in education and rehabilitation facilities for disabled persons (Jangira and Mukhopadhyay, 1989) According to crude estimates compiled from different sources about 80-100 thousand of these children are availing facility in special and general schools Only 0.07 per cent of the total enrolment in schools has been reported (CR, 1990) The fact about extremely low participation can neither be denied nor overlooked in the context of 'education for all' The challenge of advocacy, change in community attitude in general and of educational administrators in particular, resource managers, education of parents, enhancement of sensitivity of the educational system to special needs, and teacher preparation, will have to be effectively met in the nineties

Despite dismal quantitative scenario, significant initiatives were taken in the second half of the eighties. It was for the first time that education of disabled children was included in the policy on equal education opportunity. The scheme of Integrated Education for Disabled Children was revised in 1987 to adopt the Composite Area Approach instead of the selected institution approach and involvement of voluntary agencies for its implementation (GOI, 1987) The NCERT launched field demonstration Project Integrated Education for Disabled (PIED) with assistance from the MHRD and UNICEF towards the end of 1987. The field demonstration project has developed know how for mobilising the education system and support infrastructure to meet educational needs of all children including those with special needs. It yielded print and nonprint material for education and training of teachers in curriculum adjustment and adaptation of instructional material and methods to meet special needs in the classroom. The capacity of the states to implement the IEDC improved through enhanced project planning and management skills Innovative multicategory teacher training programme was evolved in the process. Use of District Institute of Education and Training for Quality Education for All Initiative (QEFAI) has been planned for field demonstration The modality for intersectoral coordination and convergence of inputs has also been evolved. In the process, about thirteen thousand children benefited in eight states and two urban slums through training of over five thousand teachers and interaction with about sixteen thousand parents and community members (NCERT, 1991)

The NCERT also initiated a programme for the utilisation of technology for education of disabled, considering the constraint of access and the accumulated backlog. Teleschool for parents of the mentally retarded children was launched this year with support from the Technology Mission for Welfare of the Handicapped, Ministry of Welfare and the National Institute for the Mentally Handicapped (Jangira, 1991). Computer programmes in Hindi are being developed under the project Computer Assisted Learning and Teaching (CALT) with support from the Department of Electronics. Prototype aids for low vision children and adapted science apparatus are also under preparation in the NCERT (DTESEES, 1991). Audio programmes have been prepared for this group.

What is being done in the area of education of children with disability is only a beginning. The challenge of the accumulated backlog due to late start will have to be adequately met in the nineties.

Drop-in Disadvantaged Child

There are educationally disadvantaged children who are drop ins not covered by the earlier groups, e.g., children of the migrants who land themselves in urban slums living on daily earnings where children also join parents in organised or unorganised work. The refugees from across the borders of Tibet, Sri Lanka, Bangladesh and Pakistan, migrant labour from Nepal and below poverty line caste children (NDG, 1990). The eunuchs have not yet been considered socially disadvantaged despite ostracisation. There are also children from affluent sections who acquire educational disadvantage due to broken homes, lack of concern for education in family due to indifferent attitude or lack of time with working parents, sudden transfer to different educational environment due to mobility of parents in service or in business. This group is relevant in view of the definition of the educationally disadvantaged in the context of education for all.

The data-base on the education of this group of children is conspicuous by its absence. Some of them are served in segregated schools (Tibetan refugees). Most of the working children are educated in Nonformal Education Centres. Several innovative programmes like 'earn while you learn', holiday schools, late afternoon schools and pavement schools have been started (NDG, 1990). About 240 thousand children are receiving education in NFE centres (GOI, 1990).

Relevant curriculum, instructional material and other infrastructural facilities have also been developed (Yadav, 1981). In some centres achievement of children in NFE Centres has been found to be equal to, or better than, that of children attending schools (Nampanthuly, 1986). Extensive training of nonformal education instructors and teachers has been undertaken. Practically, no programmes except remedial programmes are being undertaken for the last drop-in educationally disadvantaged children. Networking of all educational structures, formal as well as nonformal, with the aim of organising them for education of all such children will be the challenge of the nineties.

Summing-up

The education of the disadvantaged scenario in the Indian society is both sweet and sour. The sweet is the expanding access of all sections to education using formal and nonformal structures, increasing gross enrolment ratios, structural and curriculum reforms, and growing concern for the quality of education. The sour is the disparity in educational development in geographical space and within different social groups, persistent low retention rates, and inadequate quality of curriculum transaction unresponsive to individual needs of the child The seamy structural aspect refers to static designation of the disadvantaged groups leading to fragmentation and colouring individuals right from childhood without much gains in educational and societal terms The sweetening process will have to be undertaken more vigorously during the nineties

Futuristic Perspective

Categorisation, labelling and segregation of children for educational purpose raise several pertinent questions Are these essential for equity in education? Is there no alternative? Are these successful in achieving both quantitative and qualitative equity? Are these essential even after access of these children to educational institutions? If so, should it be static or dynamic? Should it be confined to resource allocation, or to the educational process, or both? Can there be an alternate development strategy which can dispense with labelling and segregation, be in special schools or remedial classes? If not, how to reconcile the divergent development strategy, policy and egalitarian goal of education at the grassroot?

The policy and practice contradiction has become the characteristic feature of even overtly egalitarian modern societies of long standing democratic traditions. Colouring individuals for vested purpose seems to be an accepted practice despite assertion to the contrary. "Colouring individuals seems to be distinctive to human species. Racial, caste, religious, economic, linquistic and geographical colours are too obvious to deserve special mention. The more we plea for real human colour the more these stick and look prominent. Paradoxically, education which ought to have become a liberating instrument has also become an instrument of colouring" (Jangira, 1990) The girl child, scheduled caste child, Hindu child, Muslim child, disabled child, special schools, remedial class, are all manifestations of this instrumentality It has little relevance to the educational process once the child enters school

There is no denying the fact that the entry level of children coming from different socio-economic backgrounds and their inherent potential vary. The heterogeneity of learning aptitude in the class does have a wide range. The schools however can be organised to meet individual needs of all children (Ainscow, 1990, Barther, 1987). Every child is special The teachers can also be prepared to meet individual needs even in large classes and multiple class teaching situations It is the question of effective management of classroom resources (Jangira and Ahuja, 1991, Unesco, 1991). It has also been demonstrated in classrooms in rural schools (Yadav, 1984, Hooda and Jangira, 1987). Field demonstration and relevant teacher education reform is in progress (NCERT, 1991).

If it is possible to organise schools for all children, why should it not be? Why has it not been put into practice? The reasons can be traced to the cultural conditioning of educational administrators and teachers Relative conservatism in the teaching profession may also be responsible. It also reflects the failure of our teacher training programme Rationally, it can be viewed from the vintage of educational reforms.

All along most of the educational reforms have been implemented in the structure and content of education which are relatively soft operational areas. The former is soft, because, if resources with authority are available, structural reforms can be effected with ease. The latter is soft, because expert committees can update curriculum and textual material The hard core of the educational reforms, however, refers to the process which requires high dose of human effort. The education departments and the NCERT have been relatively successful in the first two areas of educational reform, but could not succeed with reforms in the third area vital to educational outcomes of consequence This is the major reason for conventionalism and mediocrity in teaching (Jangira and Ahuja, 1991). Qualitative reform of the process of teaching is the most vital operational area for the nineties, if equity in quality along with quantity is to be achieved in education

Another concrete example of contradiction in policy and practice refers to the reluctance of education to assume the generative role. Too long colonial rule and neofeudalism in the post-independence period have conditioned not only the planners, but also practitioners to the dominance of the adaptive role of education Categorisation, labelling and segregation in policy and practice are perpetuated not for education, but for vested purpose. We seem to have entered a vicious circle. Education feels subservient and helpless tolerating and continuing inequity. Society is bound by political compulsions It is time that education demands development direction and influence macro-development policy decisions. Unless education opts for the generative role, the vicious circle cannot be broken. In fact, the schools by using cooperative learning procedures can silently transform the social attitudes of the future generation. Long-term but highly desirable practice goal indeed! It was effectively used in several situations (Jangira and Ahuja, 1991; Jangira, 1989). To some extent, it has been visualised in the new teacher education curriculum (NCERT, 1991), but much will depend on the extent to which it can be translated into textual material, teacher education curriculum transaction (a grey area so far), and transfer to practice in schools Special efforts will have to be made in the nineties to effect reforms in teacher education curriculum transaction. The District Institutes of Education and Training which are in the formative stage of development can be effectively mobilised to realise this vital teacher education goal

The cosmetic segregated special institutional structures are a grossly inadequate response to the issue of equity. For example, special schools, besides precluding early integration of disabled children, also come in the way of achievement to potential due to low expectations and limited coverage Special hostels and ashrams have neither helped quantitative expansion of education nor attainments of the disadvantaged children. There is little improvement in retention. Remedial classes provide a soft option to teachers to push out even children with above average potential demoralising the child and implicitly the general teacher too There is little evidence that children with special needs achieve less in general schools than those in segregated settings (Wang, 1990).

Model and pace setting schools may help already empowered groups surviving primary education, but postpone qualitative improvement of hundred thousands of schools educating children of the masses The recruitment of teachers contrary to the goal of excellence and doubtful curriculum practice are pointers to likely failure of Navodayas to realise the stipulated goals and widening of disparities. Resources expended in cosmetic structures in preference to the demands of normal educational structure for the masses tend to push the goal of qualitative improvement of the latter in time space (CR, 1990). The disadvantaged groups mostly located in rural and remote areas are the main casualty in the process Along with access, the process of qualitative change in the total school system rather than oasis of excellence for microscopic elitist groups needs to be accelerated. Can the planning priority be reversed, starting the improvement process from the rural and remote areas and moving towards the capital instead of the other way round? It can be possible as was effectively done in education in Sikkim in the second half of the seventies (Jangira, 1977)

Another policy contradiction refers to the curriculum practice The minimum learning levels for the schools for the masses and the autonomous character for the elitist schools are likely to increase the disparities in achievements We are starting with a deterministic note which is likely to be a self fulfilling prophecy. The minimum levels are likely to be perceived as an end by the educational practitioners. The disadvantaged groups who start with initial disadvantage are likely to be further disadvantaged throughout their educational career. The education departments and teacher preparation institutions will have to work overtime to ensure that minimum and to provide opportunity to each child to reach the optimum level. Use of educational technology including mass media can facilitate effort in this direction—a challenge to be met by planners of curriculum and textual material as well as teacher educators in the nineties.

Vocationalisation of education is to be considered in a longer perspective Two structures, the Industrial Training Institutes and the vocational stream, seem to be redundant in the present context It will further become redundant in the nineties The former were conceptualised for preparing skilled labour for industries When the base of education was low with very few even matriculates, available, even Class VIII pass were the entrants Training was purely skill-based with little education component The multipurpose scheme did not pick up, otherwise expansion of ITIs would have halted with its success. Now matriculates are available in abundance and even higher qualified children are seeking admission. The scheme of vocationalisation of education provides vocational skill with education. Both should be integrated into the educational system for fuller utilisation of resources. Only degree may be kept with the technical departments By the end of the nineties polytechnics also will have to be upgraded to degrees. During the nineties reform in vocational and technical stream should be the goal Both will gain out of this exercise.

Open learning systems at the higher education level have multiplied. At the school level, particularly at the secondary and higher secondary level, these are still more important With exploding demands for basic education of reasonable standard, funds will always be inadequate for secondary and higher secondary education. The experience of the National Open School indicates that such innovative programmes are not useful only for children, but also for adults for continuing education. This will have to be increased. Simultaneously, job oriented vocational courses, at least those amenable to this modality with ease, can be experimented with. The existing schools can be study centres for practical skills in off hours Open learning systems for the school stage will have to be designed and made functional during the nineties

The early childhood and care education is to receive the same, even more attention than primary education, because the early stimulation does not only improve educability, it also reduces the initial educational disadvantage The disparity in learning and achievement will be reduced. With the success experience, the children will grow to the potential and develop mutual trust in the school laying foundation for a society in harmony

The research in education of the disadvantaged is mostly related to status studies comparing attainments and enlisting problems. Studies on the design and assessment of intervention strategies are conspicuous by their absence (DPRPE, 1989). Research on intervention strategies for organising schools and classes in the context of Quality Education for All Initiative (QEFAI) will have to be undertaken on priority basis during the nineties The effort should be accompanied by synthesis of findings for practice and dissemination mechanism minimising the time lag in transfer of research to practice (Jangira, 1989)

Obviously, the teacher is the most vital input to realise the goal of QEFAI Preservice teacher education can be reformed, but the preparation of over four million teachers, deconditioning of their age-old beliefs and attitudes is not an easy task The impact of inservice training programmes has been doubtful We cannot afford to be tentative about it, otherwise we will land education in the same mess The emphasis has to be not on the quantity but the quality of content, the curriculum transaction practices, and transfer of training effects to classroom practice 'Transfer of training has to be designed and pursued It does not take place automatically on its own (Jangira, 1991, 1979) Considering the numbers, decentralised training through the DIETs and distance learning employing simultaneous training transfer design should be attempted throughout the nineties to realise the goal of QEFAI

Education is a multi-sectoral enterprise It is more so, if schools are to be organised to provide education for all, including those with special needs. The modalities of intersectoral functioning are not yet operational at state and substate levels despite inter-departmental coordination committees. In practice the inputs from support sectors are either not forthcoming or are peripheral At best these are assemblage and not integrative. With the result, there is dilution of resource utilisation due to maintenance cost of independent infrastructures. It assumes special significance in the face of resource crunch. The experience indicates that if the resources are optimally utilised through integrative approach to plannig and management instead of too many independent agencies and structures, the resource crunch can be minimised. During the nineties integrative planning and management strategies with effective networking of agencies from different sectors will have to be evolved and implemented to meet the special needs of education of the disadvantaged Community involvement has to be an integral part of this integrative mechanism

Educational planning is to undergo a seachange. Macro-planning has not been able to tackle geographical and intergroup disparities. Micro-planning is viewed narrowly. Micro-planning has considered district as the planning unit. There are instances of micro-planning for groups like Special Component Subplans, Tribal Subplan, etc But the process is topdown. People participation in planning is conspicuous by its absence. The result is that the beneficiaries are not even aware of the plans and schemes and these get implemented in the way the dominant groups want these to be implemented. The decentralised grassroot planning and implementation through village education communities as suggested by the NPE should be made operational in the nineties Its functionality depends on the community school which makes the neighbourhood school an essentiality

Generative, ameliorative and adaptive education for all is the goal for the nineties. Desegregated education without colouring children is the ideal to be pursued vigorously so that we can enter the twenty-first century with an educational system efficient enough to take care of education of all children. The artificial boundaries of general and special education will melt yielding to the basic term 'education'. The refinement of education through assimilation of different innovative practices is to continue. Our response to the following issues will, however, determine whether we can achieve the ideal of education without colouring children:

1 *Will general education system be willing to own full responsibility for desegregated education of all children?* The system has yet to bring special needs within the fold of the education department. The integration of children with moderate and severe impairments is yet to be accepted. The tendency to push children to segregated remedial classes and special schools is conspicuously visible. Justifications other than educational are coined to make segregate educational arrangements. Educational planning will have to overcome these prejudices

2 *Will specialists be willing to part with their expert status subsuming identity in the general education infrastructure?* The apprehensions in special education professionals are the same, if not more to part with the earned status, as is the reluctance in general education professionals to own responsibility for all children with special needs If we cannot integrate the professionals and relevant structures, how can we emotionally integrate children? Both seem to dichomatise the system into special and general because of apprehensions and vested interests developed over a period of time.

3 *Will the community and general education practitioners tolerate wide range of flexibility to adapt demands of increased heterogeneity in schooling due to integration of all disadvantaged children? Are teachers willing to prepare themselves for the task?* The issue is pertinent in view of the reactions in the emerging competitive society and the fear of the unknown The belief is that the presence of disadvantaged children makes the task of learning and achievement of other children difficult Experience with PIED however is otherwise. Effective training to equip teachers teaching special needs children in the classroom will develop confidence in the system.

4. *Will disadvantaged children be willing to lose their identity and special privileges conditioning them to positive discrimination?* The experience suggests that this is the most difficult area despite the fact that in the long run they will be the gainer socially, educationally and emotionally due to enhanced learning At least individual need based positive discrimination should be evolved instead of administratively expedient system based on caste, religion and race.

5 *Will the purse holders provide funds to school education without colouring children so that it can adequately prepare iteself for the educational needs of all children?* Financial crunch and cutbacks force the administrators to demand special funds. The purseholders are also conditioned to respond to these labels or even change of labels to continue financial assistance. It requires rethinking in the context of the gestalt view of educational planning

6. *Will different sectors relevant to education be able to shed reservations and contribute to integrated human development?* The issue refers to self preservation and domination instinct in organisations The status struggle harms children. It needs to be viewed from the human development angle

7. *Will society, in general, and, politicians, in particular, be willing to support the ideal of society without colouring people with race, caste, religion, class, language and disability?* Exploitation of these colours for political ends precludes creating a society of people with real human colour. In such a situation how can the ideal of education without colouring people be achieved? If not impossible, it is extremely difficult The subsystem reflects the colour of the system. The political will and the societal efforts in this direction is required to facilitate this educational task of national significance.

How to respond to these issues has been outlined earlier in this section and, in passing, in all sections. The future of the Indian society depends on the direction it takes and the direction it provides to education in the crucial nineties. It is a challenging task indeed! It also depends on how education responds to the challenge of the nineties. It is an acknowledged fact that Indian people respond at their best to challenges and crises. In this area also they will not be found wanting. If this well placed optimism turns out to be a reality, the Indian society will enter the twenty-first century with confidence and Indian education will emerge as a refined instrument of socio-economic transformation.

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